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By-Anderson, James G.; Johnson, William H.

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A study with emphasis upon cultural and social factors focused on urban Spanish-speaking children and their families in south El Paso, Texas. Specific objectives sought to identify: cultural and social characteristics of the student sample with respect to language patterns, basic attitudes towards school and mathematics, self-concept of ability, attitudes towards peers, and achievement motivation; and general characteristics of the student's family with respect to its socioeconomic status, language patterns, attitudes towards school and mathematics, and the amount of support given to the child to assist him in his school work. Although the students came from large, impoverished families where parents' educational levels were relatively low, higher educational aspiration for the children was evident; lack of support of the children in school was apparent, yet parents felt that everything the children studies would be valuable to them outside school. It was concluded that motivational factors were far more important in predicting success in mathematics than was the educational level of parents, or the language that they spoke. (SW)

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SOCIAL AND CULTURAL CHARACTERISTICS OF MEXICAN–AMERICAN FAMILIES IN SOUTH EL PASO, TEXAS

James G. Anderson
Research Professor of Educational Administration

and

William H. Johnson
Associate Professor of Educational Administration
New Mexico State University
Las Cruces, New Mexico

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DESIGN OF THE STUDY

The emphasis of this study is upon cultural and social factors, their variation and magnitude among the Spanish-speaking of the Southwest, and the relationship of these factors to academic success. That a considerable number of this minority group fail to succeed in the public schools is aptly supported by a survey undertaken by the Department of Rural Education of the National Educational Association in cooperation with a group of teachers in Tucson, Arizona. According to the survey, nearly 100,000 Spanish-speaking children living in the Southwest never go beyond the eighth grade. Furthermore, in the five-state area of Arizona, California, Colorado, New Mexico and Texas, one-sixth of all children in elementary and secondary schools are Spanish-speaking[1]. Of those who do enter high school many drop out. As discovered, "more than half the boys and nearly half the girls leave school at the eighth grade level to take low-paying, unskilled laboring jobs, thus, perpetuating the poverty syndrome handed down to them by their parents."[2] These children experience varying degrees of failure in mathematics, other school subjects, and school in general.

The focus of this study was on urban Spanish-speaking children and their families in El Paso, Texas. El Paso, a city of 312,000, has a Spanish-speaking population that represents 52 percent of the total. This community, bordering on Mexico, has a considerable influx of immigrants; first generation Spanish-speaking Americans. Many families, however, have resided in the community since its founding, or have resided in the city for several generations. Thus, the location selected for study provided Spanish-speakers who possessed a variety of cultural and social characteristics.

LONG RANGE OBJECTIVES

Based on the premise that cultural and social variations exist and that the knowledge of their comparative importance is basic in formulating curricular programs, the long range objectives of this project are:

(1) To identify and measure those cultural and social factors that contribute to success or failure in learning.

(2) To identify and measure the school factors that contribute to success or failure in learning.

(3) To evaluate and draw inferences as to the specific components of the home environment and the school which contribute to academic success or failure.

(4) To adapt or produce new curricular materials and alter curricular approaches to take into consideration the new knowledge uncovered in the study.

(5) To measure and evaluate experimentally new mathematics materials and approaches, and to measure ands evaluate their relative effectiveness and generalizability.

(6) To produce and disseminate appropriate findings for teachers and administrators.

Figure 1 depicts the conceptual model for the project.

SAMPLING

After receiving permission from the El Paso Public Schools to undertake the proposed study, a sample of schools was selected. A stratified selection technique was employed with the following major factors considered.

A. the socioeconomic status of various school attendance areas
B. the level of acculturation evident in these areas
C. the proportion of Spanish speaking children attending the schools in these areas.

Ultimately three rather distinct areas of the city were selected. These areas were selected by utilizing records of the El Paso City Schools such as Title I classification records and with the help of those in El Paso who have an intimate knowledge of the community. As shown on the map, Figure 2, the three school attendance areas are at varying distances from the United States–Mexican border. Nine schools were included in the sample. The characteristics of those areas are compared below:

A. Alamo-Bowie-Aoy Area
   1. It is low-income economically (i.e. low-low class).
   2. It consists of new immigrants from Mexico (i.e. first generation).
   3. It is virtually 100 percent Mexican-American.
   4. The area itself is not changing substantially in its make-up.
B. Zavala-Henderson-Jefferson Area
   1. It is a higher income area (i.e. high-low class).
   2. It consists of second generation Mexican-Americans.
   3. It is largely Mexican-American with some Negroes.
   4. Again the area is not changing substantially.
C. Crockett-Bassett-Austin Area
   1. This area is definitely middle class.
   2. The Mexican-American families in this area have been in El Paso for three generations or more.
   3. It is about 50 percent Mexican-American.
   4. It is rapidly becoming predominantly Mexican-American.

In each of the three areas a high school was selected first, then an intermediate school and an elementary school which sent the greatest number of students to that high school. Within each geographic area a sample of grades to include all levels (primary, intermediate, junior high and senior high) was decided upon. In the elementary and junior high schools, grades one, three, six and seven were included. High school classes in grades nine to twelve were sampled to represent classes described as "academic" and "non-academic." Figure 3 depicts the breakdown according to schools, grades, classes, students and teachers.

Data were also collected on a sample of families whose children attend schools in the three areas. In order to obtain this family data, a sub-sample was selected to represent the three geographical areas, the schools, and the classrooms studied. This sample is depicted in Figure 4.

DEVELOPMENT OF QUESTIONNAIRES AND INTERVIEW SCHEDULES

The study was designed to provide data relative to the student's capacity, achievement, environment, family, school and classroom. Data were collected to examine the factors that affect success or failure in school.

A questionnaire was constructed for each of the three grade levels (primary 1-6, intermediate 7-8 and high school 9-12). Questions were included to collect background data on the student and his attitudes towards school, learning, peers, teachers and the community.

In order to validate these instruments, a pilot study was conducted in Las Cruces, New Mexico. Situated approximately fifty miles from the Mexican border, this town of 50,000 has a Spanish-speaking population representing 50 percent of the total population. A sample of nine-hundred and sixty-three children was used in the study. A battery of 254 questionnaire items were reviewed by a panel of guidance personnel in the Las Cruces school system and the project staff. One hundred and forty were selected to be administered to students in grades seven through twelve. A short questionnaire of thirty-seven items was used to obtain background data on students in grades one through six.

After analysis of the pretest data, three instruments were developed for the El Paso study[3]. A primary form for grades one and three composed of 37 background items was developed which was completed by the classroom teachers. An intermediate form of 63 items and a secondary form of 120 items were administered to students in grades nine to twelve.

One of the major assumptions of the study was that background variables play a major role in the success of students in school. For this purpose an interview schedule was developed which solicited information regarding family background, attitudes of family members towards school and education, facts about the family's socioeconomic status, where parents and grandparents were born, and the language patterns and social interaction of the family. A pilot study utilizing a sample of 163 families in Las Cruces was used to validate the interview guide. A pool of 140 items was utilized in the pilot program and reduced to 120 items for the El Paso study.

SPECIFIC OBJECTIVES

The specific objectives of this study were both descriptive and analytical in nature. Primarily it was directed toward identifying:

1. The cultural and social characteristics of the student sample with respect to language patterns, basic attitudes towards school and mathematics, self-concept of ability, attitudes towards peers and achievement motivation.
2. The general characteristics of the student's family with respect to its socioeconomic status, language patterns, attitudes towards school and mathematics and the amount of support given to the child to assist him in his school work.

These objectives are essentially descriptive in nature. An ultimate goal of the study, however, is to build a predictive model utilizing the above data to ascertain the factors which contribute to a student's success or failure in the school and to measure the degree to which each contributes to his success or failure.

During the school year 1967-1968, data were collected from students and their families utilizing the questionnaires and the interview schedule developed by the staff of the project. These data are analyzed in subsequent sections of this report.

A PROFILE OF THE FAMILY IN SOUTH EL PASO

A total of 481 families were interviewed. All of these families reside in the three areas of south El Paso that were described earlier. The method used to select the families interviewed has also been described. Sixty-eight percent of the interviews were with the child's mother. In twelve percent of the cases the father was interviewed, and in only six percent of the interviews were both parents present.

As Figures 5 and 6 demonstrate, 39 percent of the mothers and 32 percent of the fathers responding to the interviewers were born in Mexico. Moreover, about one-third of the children have grandparents still residing in Mexico. A little better than half of the mothers and fathers were born here in the United States. There is remarkable stability among the population that was surveyed. Fifty percent of the families report having lived in El Paso for five years or longer; while another 39 percent of the individuals interviewed have lived in El Paso all of their lives. On the whole the families are large, averaging between four and five children. Almost one-fourth of the families have seven or more children.

SOCIOECONOMIC LEVEL

The educational level of the parents is quite low. Fifty percent of the mothers and 40 percent of the fathers have less than eight years of education. Only 16 percent of the mothers and 22 percent of the fathers have graduated from high school.

The father's occupational level is quite low. Twenty-nine percent are engaged as farm laborers, janitors, and general laborers. Another 32 percent of the males are engaged in skilled and semi-skilled occupations as mechanics, fireman, barbers, plumbers, etc. Only eight percent are found in managerial or professional occupations.

Despite the low occupational level of the fathers only one-fourth of the mothers work full time. While another 10 percent have part time jobs (Figure 7). Of those who do work, 61 percent work as domestic servants, waitresses or as common laborers. It is rather notable that 65 percent of the mothers do not work at all.

The families interviewed apparently have rather mixed feelings about the future. While 52 percent of the parents feel that they should plan ahead, 32 percent are rather pessimistic about the value of planning for the future. Another 15 percent are undecided.

LANGUAGE USAGE IN THE HOME

Forty-six percent of the individuals interviewed indicate that they use Spanish exclusively in conversing with their husband or wife (Figure 8). Correspondingly, in 43 percent of these families Spanish is the sole language used in conversing with the children (see Figure 9). These percentages rise to 66 and 61 percent, respectively, when one considers the language used in the home most of the time. Apparently, for almost

two-thirds of the children included in this study the use of English is limited largely to contacts with teachers and other students in school.

When we move outside of the immediate family, the same language pattern obtains. Two-thirds of those interviewed indicated that in contacts with personal friends and with other families living in the neighborhood, Spanish is spoken most of the time.

ACTIVITIES OUTSIDE OF THE HOME

Activities outside of the family are quite infrequent. Among the mothers, 69 percent, 81 percent and 87 percent do not even belong to a religious, civic, or social organization, respectively. The same lack of participation obtains among the husbands. Sixty-four percent, 71 percent, and 70 percent of the fathers responding indicated no affiliation with religious, civic, or social organizations, respectively.

Family attendance as a group at religious activities is also less frequent than one might expect for families such as these with children still in school. One out of four families never attends religious activities together. Another 26 percent of the families interviewed attend less than once a month.

Parents, however, report more frequent attendance at school functions. Figure 10 shows the frequency of attendance of mothers at P.T.A. meetings, parent days, etc. While 37 percent of the mothers again indicate never having attended a parent's affair at the schools in which their children are enrolled, 45 percent have attended such affairs at least on several occasions. Nevertheless, only about one in five report regular attendance. As might be expected the incidence of fathers participating in parent events sponsored by the schools is even lower. Forty-eight percent of the fathers have never attended one of these affairs. Only eleven percent attend regularly.

FAMILY ATTITUDES TOWARD THE SCHOOL

Mothers' attitudes toward education is reflected in their educational aspirations for their children. Eighty-one percent of the mothers of families interviewed indicated a strong desire for their children to complete high school even though, as we saw earlier only 16 percent of these women completed a high school education themselves. When it comes to college, 60 percent of the mothers indicated that, although they would like to see their children attend, it was largely up to the children to decide for themselves.

The amount of assistance with school work reported by mothers varies as shown in Figure 11. Two-thirds of the mothers report that they seldom or never assist their children in any way with their school work. Only 15 percent of the mothers interviewed indicated that they regularly help their children with school work.

As with the mothers of the families interviewed, 69 percent of the fathers are highly desirous that their children complete high school. Also in 48 percent of the families that responded to the questions regarding the father, college attendance is desired but is left up to the children. This strong emphasis on formal education takes on added significance when it is noted that only 22 percent of the fathers have completed high school themselves, while an additional 40 percent have completed less than eight years of education. Nevertheless, 42 percent of the families report that the father

seldom if ever helps the children with their school work. Only 10 percent report regular assistance on the part of the father.

The inordinate emphasis on education among families in which the parents for one reason or another were largely unable to complete much formal education is evidenced by the responses given to several other questions. All but about four percent of those interviewed indicated that they would be disappointed if their children were unable to finish high school. Seventy-seven percent of the parents felt that almost everything that their children studied in school would be valuable to them outside of school. Ninety-one percent indicated that they would insist that their children continue in school until they graduated even if school attendance were not compulsory.

However, some of the families expressed reservations as to the amount of encouragement that teachers, counselors and school administrators give to their children. (See Figure 12). Little or no encouragement is perceived by 11 percent of the families. Another 30 percent feel that some encouragement is given, but only a little more than half of the families interviewed indicate that they believe that there is much encouragement given to their children in school. This attitude among parents regarding school personnel is important since 22 percent of the families feel that the school's program of studies is excellent. Another 60 percent feel in general that the school program is good for their children.

Moreover, the distrust of teachers is manifest among a significant number of the families as indicated by the fact that one in five feels that teachers are only willing to help their children some of the time when they experience difficulties with school work. Only 42 percent of the parents interviewed see teachers as being always willing to assist their children (See Figure 13).

A PROFILE OF THE ELEMENTARY SCHOOL STUDENT

A total of 680 elementary students in grades one and three were included in the study. Teachers completed a 36 item questionnaire for each of these students. Of the 680 students, 333 were male, 343 were female. For four students this information was omitted.

The great majority (87 percent) were born in the United States. However, as shown in Figure 15, less than half of the students had parents both of whom were born in the United States. Moreover, in 24 percent of the cases, both parents were born in Mexico. In another 21 percent of the families, at least one of the parents was born in Mexico.

With respect to paternal and maternal grandparents (see Figure 16), in 44 percent and 48 percent of the families, respectively, both grandparents were born in Mexico. Consequently, in this sample a substantial majority can be classified as first, second or third generation Mexican-American on the following basis:

> If the child indicated that he was born in Mexico then he was classified as first generation Mexican-American.
>
> If the child indicated that he and both of his parents were born in the United States but that **any one of four** grandparents were born in Mexico then he was classified as third generation Mexican-American.

If the child indicated that he was born in the United States but that either his father or mother was born in Mexico then he was classified as second generation Mexican-American.

If the child indicated that he, his parents, and all of his grandparents were born in the United States then he was classifiedsas fourth (or more) generation.

Later in the analysis, this breakdown is used to provide a more definitive picture of the student population.

Large families are characteristic of the sample. As portrayed in Figure 17, 17 percent of the children are from families that include eight or more siblings, while only four percent of the elementary school children can be classified as being only children. On the average, these children are from families with five children.

The level of formal education possessed by the parents of these children is relatively low. Figure 18 indicates that 53 percent of the fathers have less than a high school education. Sixty-four percent of the mothers are in this same category. In addition, teachers were unable to report this information for 23 percent of the fathers and 14 percent of the mothers.

Another aspect of socioeconomic status, the occupation of fathers, was also examined. Thirty-five percent of the fathers hold jobs in the lowest of five categories of job descriptions developed for this study. Jobs in this category include cannery workers, janitors, farm laborers, general construction workers and garbage collectors. Another 30 percent hold jobs in the next category which includes firemen, policemen, carpenters, plumbers, bakers, mechanics, etc.

THE LANGUAGE ENVIRONMENT OF THE STUDENT

Language patterns as revealed by the language spoken between parents and between children in the home is presented in Figure 19. Only 24 percent of the children and 15 percent of the parents of these children use English all of the time. Concurrently, 37 percent of the parents of these children and 15 percent of the children speak Spanish all of the time in their everyday lives. These data present a picture of the majority of this sample with close ties to the Mexican culture and the Spanish language outside the confines of formal education.

THE STUDENT AND SCHOOL

Pre-school experience is limited for most of these children as only nine percent have attended a nursery school and only 27 percent reported kindergarten attendance. Texas, however, does not provide public pre-school experiences which accounts in part for these low percentages. Fifty-two percent have attended short term pre-school Head-Start sessions.

School mobility rates, as determined by the number of schools attended by these young children, reveal that two-thirds have never changed school settings. Of the one-third that have attended more than one school, ten percent reported attendance in three or more schools.

A great majority of the students responded that they felt school was "fun" (93 percent). Only 30 percent reported that they found school hard and more seemed to enjoy all subjects in school equally than to favor any one particular subject. As indicated in Figure 20, arithmetic was selected as the hardest subject by 40 percent of the students. More than twice the number selected this subject over the next highest choice of reading.

In this sample mathematics does appear as being singled out more than any other subject by students and in a manner that may reflect special difficulty in this area.

A PROFILE OF THE INTERMEDIATE SCHOOL STUDENT

One thousand and six student questionnaires from grades 6 and 7 were analyzed in this study; 471 were boys and 535 were girls. As in the elementary schools, students come from large families with 72 percent of the students reporting four or more siblings. Eight hundred and eight (80 percent) of these students were born in the United States and 16 percent were born in Mexico.

FAMILY ATTITUDE TOWARD SCHOOLWORK

Forty percent of the students report that their fathers seldom or never help them with their school work. The same relationship was true for the mothers as 38 percent of the children reported that their mothers seldom or never helped with school work. Thirteen percent of the fathers were reported as helping with the school work most or all of the time, while 20 percent of the mothers helped most or all of the time.

With further analysis it was found that there was a direct relationship between the length of time the family had lived in the United States and the amount of help the parents gave the children. The longer the family had been in the United States, the more help their parents gave them. For example, while 39 percent of the first generation children reported that their fathers never assist them with school work in any way, only 13 percent of the fourth generation students report the same lack of assistance.

THE STUDENT AND MATHEMATICS

There is an interesting paradox in the attitude of the student toward mathematics. When asked what subject they liked the best, 31 percent chose mathematics. However, when asked what was their hardest subject, 35 percent responded, mathematics. Thus, the students indicated that while they liked mathematics, it was difficult for them. Whether their knowledge that this was a survey for a mathematics project biased their responses is impossible to estimate, but this must be considered in evaluating such responses.

No significant trends across generations were noted; a first generation student was just as likely to like mathematics as a second, third, or fourth generation student and a first generation student was also just as likely to find mathematics his hardest subject as students whose families had been in the United States for more than one generation. The students reported that they ask the most questions in science and mathematics classes, and that the teachers talked the most in the math classes.

The students also reported that they asked their parents' for help with mathematics, and 82 percent of the students agreed with the statement: "My parents think mathematics is my most important subject." There was evidence that even though the students found mathematics difficult, they tended to like studying it, as 76 percent indicated they enjoyed studying mathematics.

THE LANGUAGE ENVIRONMENT OF THE STUDENT

The language the parents spoke to each other was predominately Spanish, although the fourth generation residents of the United States tended to speak mostly English to each other.

Fifty-five percent of the students tend to speak English to their siblings, with a very strong tendency for the children to speak more English to each other the longer they have been residents of the United States.

A very similar pattern emerged for the language used with the student's peers. Fifty-two percent of the students reported using English most or all of the time with their friends, and there was clearly increasing use of English with increasing United States residence as shown in Figure 22. Thus, while only 37 percent of the first generation students reported using English most of the time with their peers, 76 percent of the fourth generation students used English most of the time with their friends. An overwhelming majority (90 percent) of the students listen to English language radio and TV programs.

THE STUDENT AND SCHOOL

The students report generally positive experiences in school. For example, when asked, "Do most of the teachers like you?", 80 percent responded "yes." Similarly, 81 percent of the students report that teachers treat children fairly.

The students evidently do not get complimented a great deal on their school work, as their responses to the question, "Do teachers ever compliment you about your school work?", shows that 18 percent reported "often," another 62 percent responded "once in awhile," and 20 percent answered "seldom or never."

Most students report they get help from their teachers with school work. Eighty-six percent of the students indicated that they get "a great deal" of help from their teacher, or that the teacher gives help when the students ask for it. Most students also indicated that they do not voluntarily stay away from school. Eighty-six percent of these students indicated they had **not** stayed away from school last year "just because they didn't want to go." Seventy-four percent of the students also perceive that almost everything in their present school studies will be valuable to them in "everyday life."

Overall, then, the picture of the student and his school is positive. The students see the value in their school work, feel liked and helped by their teachers and do not "play hooky." While a vast majority of these students may feel positively about school and school work, many still study under a handicap as 43 percent report they do not have a place at home where they can study.

Concerning academic motivation, approximately 63 percent of the students indicated that they try to do better than other students and felt that it was very

important to please the teacher. Eighty-two percent indicated that it was very important to get good grades. Thus, again, the great majority of students evidence positive attitudes concerning the school and its program.

A PROFILE OF THE HIGH SCHOOL STUDENT

This section is based on the analysis of 1381 student questionnaires gathered from the three high schools described earlier. Seven hundred and eighteen of these students were males and 661 were females. One thousand and seventy, or 77 percent, of these students were born in the United States. As noted for the elementary and intermediate students, these students tend to come from large families, with 53 percent of the students reporting four or more brothers or sisters. However, there is a tendency for families that have lived in the United States for more than two generations to have smaller families, as shown in Figure 23. Thus, while only 24 percent of the first generation students reported less than four siblings, 48 percent of the fourth generation students reported less than three siblings.

Most of these students come from stable families as 69 percent of the students reported they were living with both of their natural parents.

THE STUDENT AND SCHOOL

Student enthusiasm for attending school has not waned too much since elementary school since 89 percent indicate they would be very disappointed if they could not finish high school.

When asked what their plans were following school, 49 percent of the boys responded that they intended to go on to college. Fifteen percent were undecided. (See Figure 24) Forty percent of the girls indicated their intention to attend college. However 27 percent were unsure of their plans following high school. A surprisingly small percentage indicated their desire to become housewives immediately after completing high school.

From the above, it is evident that close to half of these high school students hope to go to college. Ninety-three percent reported they felt that they had the ability to complete high school, while 47 percent felt they had the ability to complete college.

STUDENT GRADES

The students reported their grades in English and Mathematics. Figure 26 is a composite of their responses. It is interesting to note that their grades tended to be lower in mathematics, especially in the D and F range. While only 13 percent of the students reported getting poor grades in English, twice as many students, or 26 percent, reported poor grades in mathematics. Many of these students are working under a handicap, as 42 percent of them reported they had no special place at home where they could study.

Despite the difficulties that students apparently experience in mathematics, they appear to like mathematics. As Figure 27 indicates, when asked to indicate the subject they liked best, 21 percent selected mathematics. Apparently science and mathematics

are the two favorite subjects in our sample of high school students. Moreover, high school students recognize the value of mathematics in everyday life, as 54 percent indicated they thought it was very valuable.

A good proportion of the students are following up this recognition of the importance of mathematics with study effort, as 34 percent said they spend one hour or more a day outside of class studying mathematics. However, this finding should be tempered with the recognition that 24 percent of the students reported they spent no time studying mathematics outside of class.

In an attempt to further elicit the student's feeling about mathematics, the students were asked to indicate how strongly they agreed or disagreed with two statements. In one statement "Mathematics is enjoyable (fun)," 51 percent responded "strongly agree" or "agree." To the second statement, " I don't like studying mathematics," 61 percent answered that they strongly disagreed or disagreed with this statement.

In general, almost half the students, 46 percent, reported feelings "that they just cannot learn." This coincides with the amount of effort these students report putting into their school work. When asked "In your school work, how often do you try to do better than others," 37 percent gave responses ranging from "never" to "sometimes." Clearly, there must be a large number of students who are discouraged, when better than one-third of the students respond in this manner. Nevertheless, 83 percent of the students reported they would complete high school even if they did not have to go to school, and 87 percent reported they would rather stay in school than quit and take a job.

Perhaps one of the reasons the students do not want to leave school is that they recognize the future value of education. When asked "How much of what you are studying in school will be valuable in everyday life," 56 percent responded "most everything."

LANGUAGE HABITS

These students come from predominately Spanish-speaking homes, but there is evidence that the longer a family has been in the United States, the more English they speak. Figure 28 shows this trend.

Among parents and children the same trend is clearly evident, the longer the family has been in the United States, the more English its members speak. As noted earlier, children apparently adopt the English language in conversing among one another to a greater degree than do their parents.

PEER INFLUENCES

Since a student's friends are known to have a marked influence at the high school level, the questions about the student's peers were of interest. When asked how much they thought their friends wanted to finish high school, 72 percent responded "much" or "very much." To a similar question asking how much their friends felt they should go to college, 42 percent responded "much" or "very much," while 44 percent responded their friends wanted to go "some," and the remaining 14 percent had friends that did

not care. Thus, an overwhelming majority of students have friends that want to finish high school, but a smaller number of their friends care a lot about going on to college. Interestingly enough, fourth generation students have many more friends who want to go to college, as Figure 29 shows.

Besides the above demonstrated peer pressure to complete school, there is a strong peer influence on academic motivation. Seventy-one percent reported their friends want "very much" or "much" to get good grades. When asked how many of their friends had dropped out before finishing high school, 77 percent responded "none or almost none of them."

JOB ASPIRATIONS

These students expect the public schools to prepare them for future employment, since 88 percent "agreed" or "strongly agreed" with the statement: "The most important purpose of the public schools is to prepare people for getting good jobs."

When the high school students were asked to indicate the level of occupation that they expect to enter eventually it is rather significant to note that among the boys 35 percent chose the highest occupational category. This is significant when it is noted that only four percent of these boys come from families in which the fathers occupy jobs in category five and only eight percent from families in which the fathers occupy jobs in category four. Nonetheless, one in four indicated that they are uncertain as to their occupational future and 20 percent of these students expect to assume jobs in the lowest two categories (see Figure 30).

The same information regarding occupational expectations was elicited from the girls. While 32 percent of the students sampled indicated that they expect to enter a profession such as teaching, nursing, or pharmacy, another 38 percent expect to perform clerical duties.

The rather small percentage of girls who indicate no intention to pursue an occupation outside of the household is quite significant when we note from Figure 10 that 65 percent of the mothers do not work at all despite the relatively low family incomes. Certainly, this finding represents a rather remarkable difference in opinion between mothers and daughters regarding the woman's role in the family.

In summary, this survey of the Mexican-American high school student was based on the questionnaire responses of 1381 students. These students generally come from large, Spanish-speaking families. Over half of them feel most of what they are studying in school will be valuable to them later, and they like mathematics and science. They find mathematics to be their most difficult subject, and about one-third of them devote at least an hour each day studying it.

The majority of these students have definite occupations in mind after they complete their schooling. More than 80 percent want to complete high school, and about half of them would like to go to college. They feel the school's purpose is to prepare them for the world of work, and over half of them attempt to do well in their school work. For some this entails a great deal of effort, as almost half of them have no place to study at home, and 40 percent are working to earn money during the school year.

CONCLUSION: THE STUDENT AND HIS FAMILY IN SOUTH EL PASO

Families whose children attend the public schools in South El Paso can be best described as large, impoverished, and Spanish-speaking. Seventeen percent of the children in our sample were born in Mexico, as were approximately one-third of their parents. Despite the large number of families surveyed that have lived in El Paso for a generation or longer, parents' educational and occupational level remain consistently low in South El Paso. Eighty-four percent of the fathers of the 481 families surveyed have less than a high school education. In fact, 50 percent of the mothers and 40 percent of the fathers of these families have completed less than eight years of formal education.

Twenty-nine percent of the male adults are employed at the lowest levels as laborers, janitors, etc. Only eight percent are found in managerial or professional occupations. In view of the low income of these families, it is rather surprising that only one-fourth of the mothers work full time. Two-thirds of those that work are employed as domestic servants, waitresses, or common laborers. On the other hand, 40 percent of the high school students surveyed indicated that they work to earn money outside of the home during the school year. About 15 percent of these children work more than eight hours a week. The absence of working mothers and the high proportion of working students suggests that many of the families residing in South El Paso may retain the traditional view of the woman's role in the family as being that of a mother and homemaker. Consequently, there may be strong resistance to the wife working outside of the home despite the impecuniary state of the vast majority of these families. Along with this view of the mother's role, many of these families apparently expect their children to earn an income outside of the home while they are still attending high school.

The **lingua franca** among these families continues to be Spanish even after residing in the United States for several generations. In 66 percent of the families interviewed, Spanish is almost exclusively used between husband and wife. In 61 percent of these families the parents use Spanish most of the time in conversing with their children. Outside of the family the same pattern obtains, at least among the parents. Two-thirds of those interviewed indicated that Spanish is spoken most of the time in conversing with personal friends and other adults. Among the children, however, the amount of English spoken to brothers and sisters steadily increases with each passing generation and also with increasing exposure to the school until 84 percent of the fourth-generation high school students report using English most of the time in conversing with siblings. These data would suggest that language continues to be a handicap for Mexican-American children in the schools of South El Paso. For almost two-thirds of the children included in this study the use of English is limited largely to contacts with teachers, siblings, and peers outside of the home.

The parents interviewed on the whole are highly desirous that their children obtain a high school education. Over 80 percent of the mothers and 69 percent of the fathers of the interviewed families strongly indicated that they want their children to complete high school. Moreover, 60 percent of the mothers and almost 50 percent of the fathers

indicated that they would like to see their children attend college. This strong expression of the value of formal education may be partially due to the inordinately low level of educational attainment of the parents (i.e., better than four-fifths of the parents have not completed high school).

However, there is some evidence that would suggest that parents while placing a high value on formal education, inadvertently do little to assist their children in school. For instance, we have already seen that 40 percent of the high school students work outside of the home while attending school. The income of these children may be an economic necessity for these families, but at the same time, employment while attending high school may also prove to be deleterious to the child's performance in school.

Moreover, 43 percent of the students above the fifth grade level report that there is no place for them to study at home; again, a circumstance that may greatly inhibit the child's achievement in school in light of the large number of siblings in these homes (four to five on the average).

The children in our sample also report that in many families parents seldom if ever assist them in any way with their school work. In fact, at the elementary level in the first and third grades the children indicate that in 21 percent of the families the mother never even discusses school with the child. The same lack of interest in the child's progress in school is true of 31 percent of the fathers of elementary school children. If we look at the responses of junior and senior high school students about parental assistance, a similar picture emerges. Thirty-eight percent of the sixth and seventh graders indicate that both parents seldom if ever assist them with their school work. At the high school level lack of parental assistance is reported by about 60 percent of the students.

This lack of direct support of the school is also suggested by the infrequent participation of parents in parent events sponsored by the school. Thirty-seven percent of the mothers and 48 percent of the fathers of these children have never attended a parent's affair at the schools in which their children are enrolled. In only about one out of five families has the mother attended such affairs regularly. Fathers' regular attendance occurs in only about one out of nine cases.

This lack of support for their children in school may be largely the result of the limited education of the majority of these parents as well as their lack of facility with the English language. Parents who cannot speak English may well find contacts with teachers, school administrators, counselors, and other parents painful and acutely embarrassing. Consequently, they may avoid such contacts by not attending P.T.A. meetings, parent days at the school, or even talking informally to a teacher or counselor about the progress of their children in school.

This interpretation gains credence when we examine parents' views of the school. Seventy-eight percent of the families interviewed felt that almost everything that their children studied in school would be valuable to them outside of the school. At the same time only slightly more than half of the same families felt that their children received frequent encouragement in school. Also, one in five feels that teachers are only willing to help their children some of the time when they experience difficulties with school

work. This seeming distrust of teachers may be occasioned by the relative lack of contact of parents with the school for it is not generally shared by their children. Eighty-three percent of the junior high school students feel that their teachers like them. Also, about 88 percent of the intermediate and high school students view teachers as being willing to help them when they ask for help. At the same time, however, teachers apparently only infrequently compliment their students. In the sixth and seventh grades only 18 percent of the students report being frequently complimented on their work. About one-third feel that they are frequently complimented in the high schools. Twenty percent and 38 percent, respectively, of the sixth and seventh graders and the high school students report never being complimented by teachers. While possibly unintentional, this lack of overt encouragement that students apparently perceive may have serious ramifications for the school. Almost half of the high school students reported feeling "that they just cannot learn." Moreover, when asked "In your school work, how often do you try to do better than others," 46 percent responded only sometimes, seldom, or never.

This same ambivalence is manifested toward mathematics by students. Twenty-three percent of the students included in the sample indicated that mathematics was their most enjoyable subject. At the same time, 40 percent indicated that for them it was the hardest subject. Possibly this lack of encouragement that parents and child perceive may discourage many children by the time they reach high school and adversely affect their performance in school. This finding is of particular importance since the pilot study that was conducted in Las Cruces, New Mexico, indicated that motivational factors were far more important in predicting success in mathematics than were the educational level of parents, or even the language that they speak.

FOOTNOTES

[1] "Few Spanish-Speaking Children in High School in Southwest," *School and Society*, November 12, 1966, pp. 376.

[2] *Ibid*, pp. 378.

[3] The results of the analysis of these data from the pilot study have been reported in James G. Anderson and William H. Johnson, "Sociocultural Determinants of Achievement Among Mexican-Americans," paper prepared for the National Conference on Educational Opportunities for Mexican-Americans, Austin, Texas, April 25-26, 1968.

FIGURE 1

SOCIOCULTURAL FACTORS AFFECTING ACHIEVEMENT

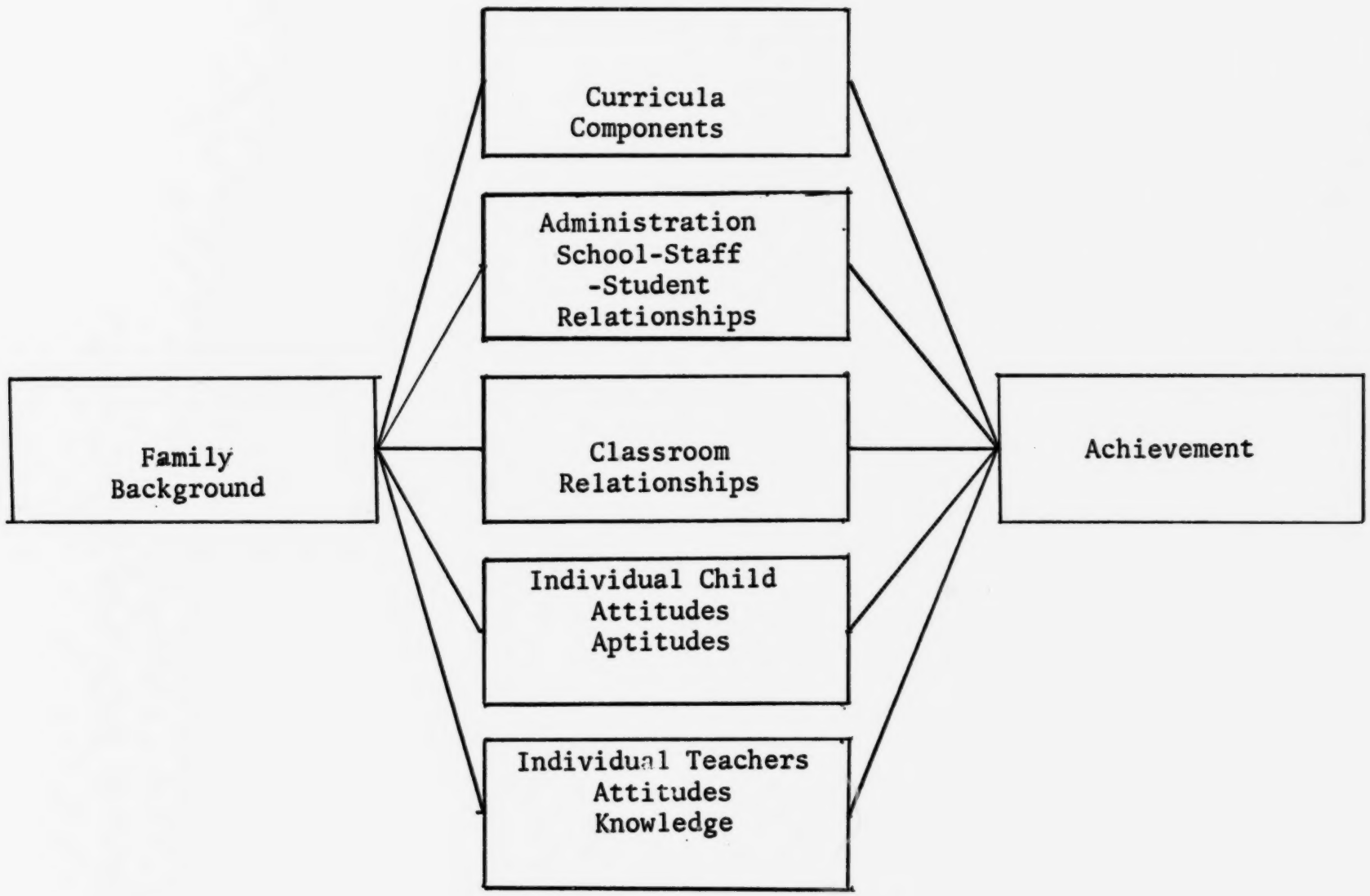


FIGURE 2

METROPOLITAN EL PASO

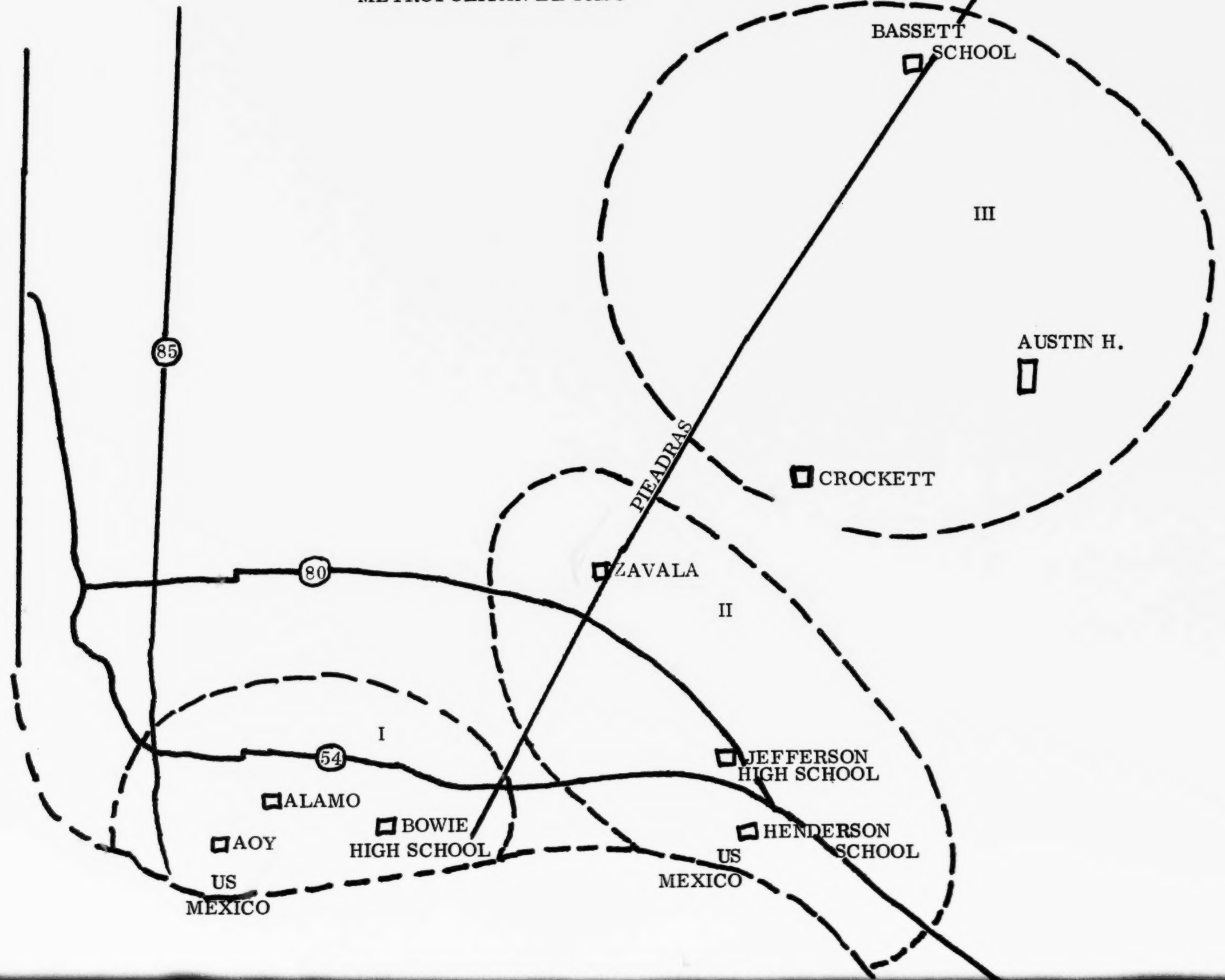


FIGURE 3

DESCRIPTION OF THE SAMPLE OF SCHOOLS AND CLASSES

SCHOOLS	GRADES	NO. OF CLASSES	NO. OF STUDENTS	NO. OF TEACHERS
Crockett	1	4		
	3	4		
	6	2		
	7	2		
	Total	12	363	11
Bassett	6	3		
	7	4		
	Total	7	199	4
Austin	9	8		
	10-11-12	10		
	Total	18	492	9
Alamo	1	3		
	3	2		
	6	3		
	Total	8	223	8
Aoy	1	2		
	3	2		
	Total	4	197	7
Bowie	7	4		
	9	8		
	10-11-12	9		
	Total	21	633	9
Zavala	1	4		
	3	4		
	6	3		
	7	3		
	Total	14	427	13
Henderson	6	4		
	7	4		
	Total	8	258	3
Jefferson	9	8		
	10-11-12	10		
	Total	18	520	9
		—	—	—
	TOTALS	110	3,312	73

FIGURE 4

SAMPLE OF FAMILIES TO BE INTERVIEWED

GRADE LEVELS	SCHOOLS								
	AOY	ALAMO	ZAVALA	CROCKETT	BASSETT	HENDERSON	BOWIE	AUSTIN	JEFFERSON
1	30	30	30	30					
3	30	30	30	30					
6	30	30	30	15	15	30			
7			15	15	15	30	15		
9							30	30	30
10-11-12							30	30	30

TOTAL - 570 FAMILIES

FIGURE 5

MOTHER'S PLACE OF BIRTH

N = 481

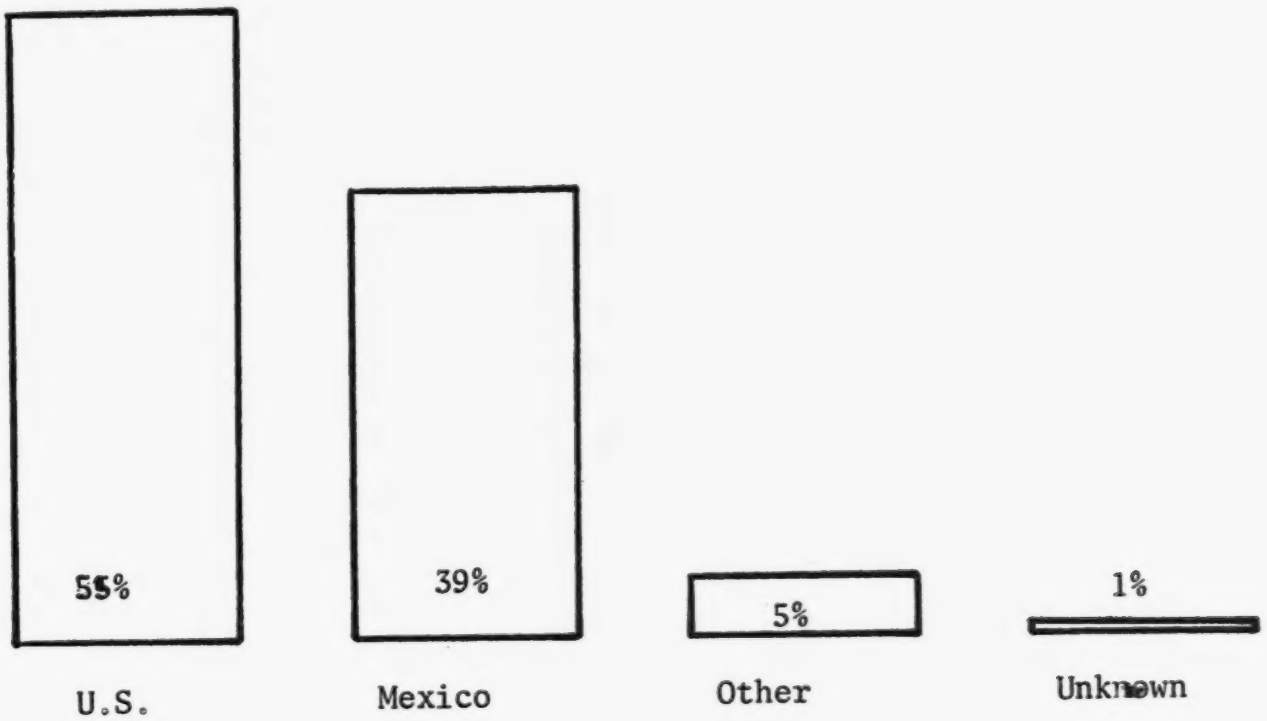


FIGURE 6

FATHER'S PLACE OF BIRTH

N = 481

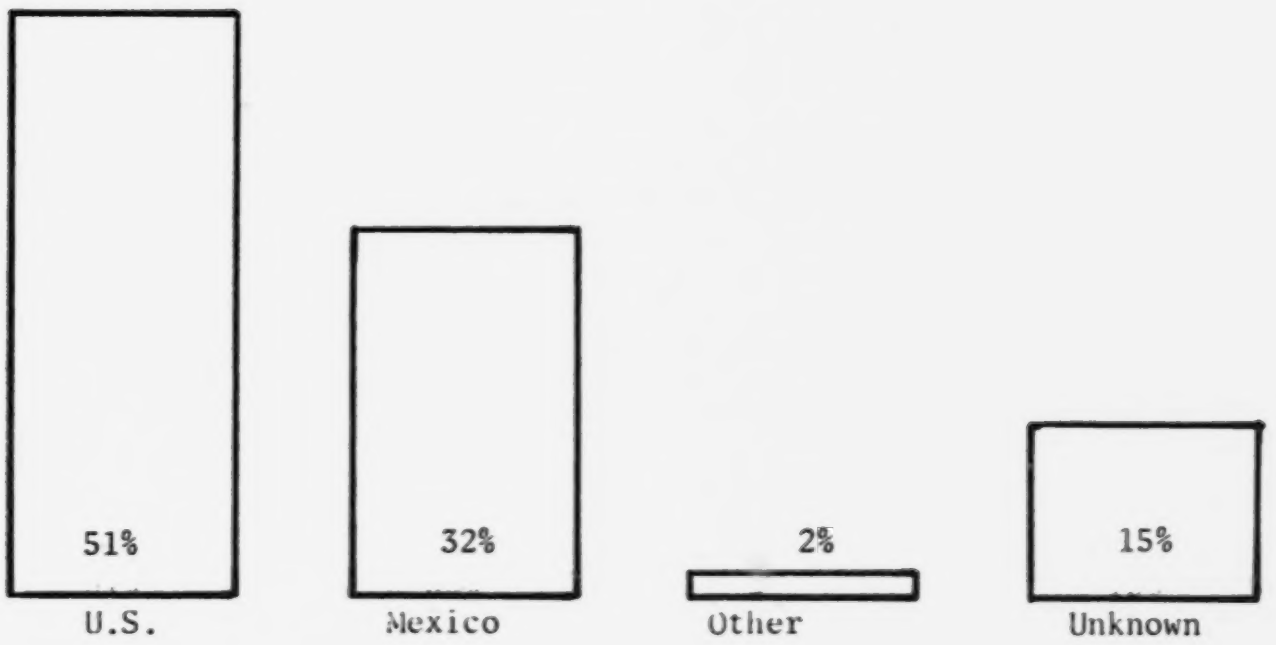


FIGURE 7

MOTHER'S WORK

N = 481

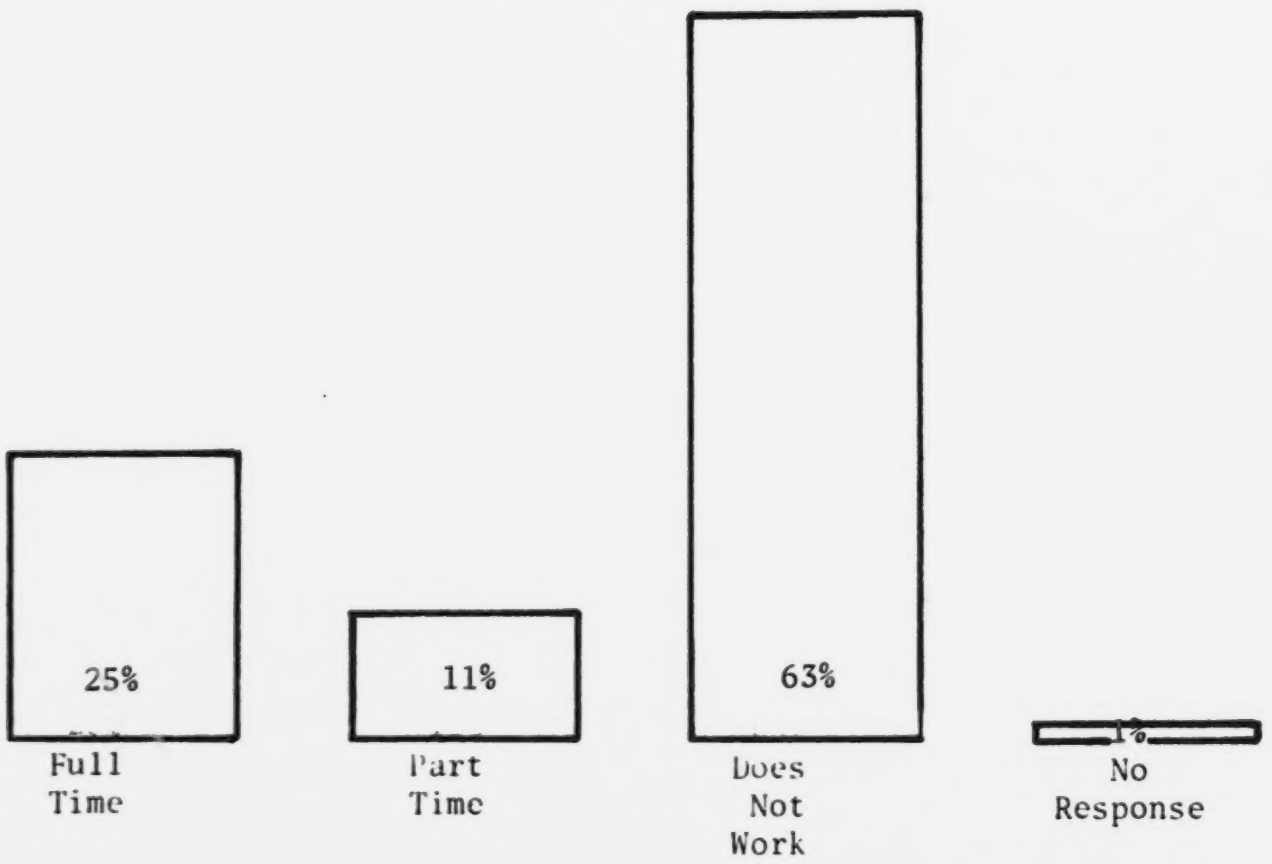


FIGURE 8

LANGUAGE USED BETWEEN PARENTS

N = 481

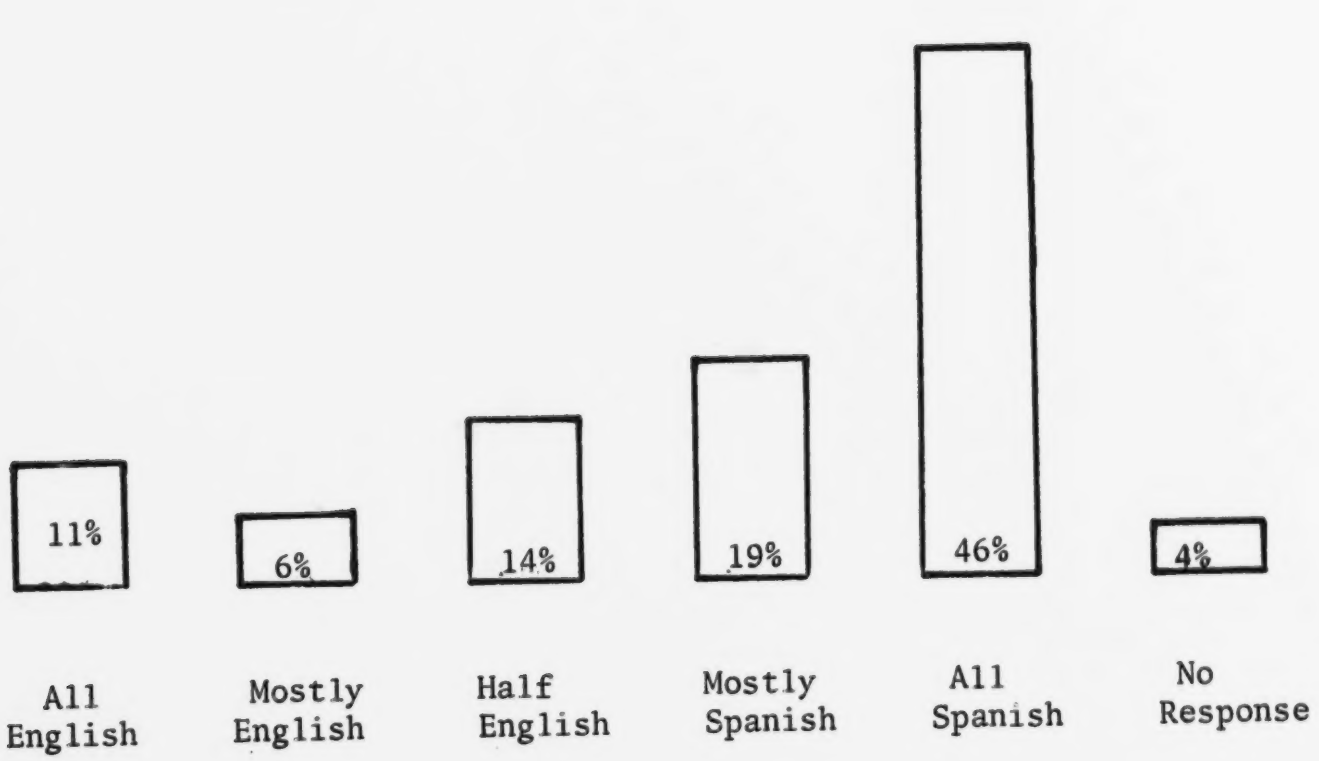


FIGURE 9

LANGUAGE USED BETWEEN PARENTS AND CHILDREN

N = 481

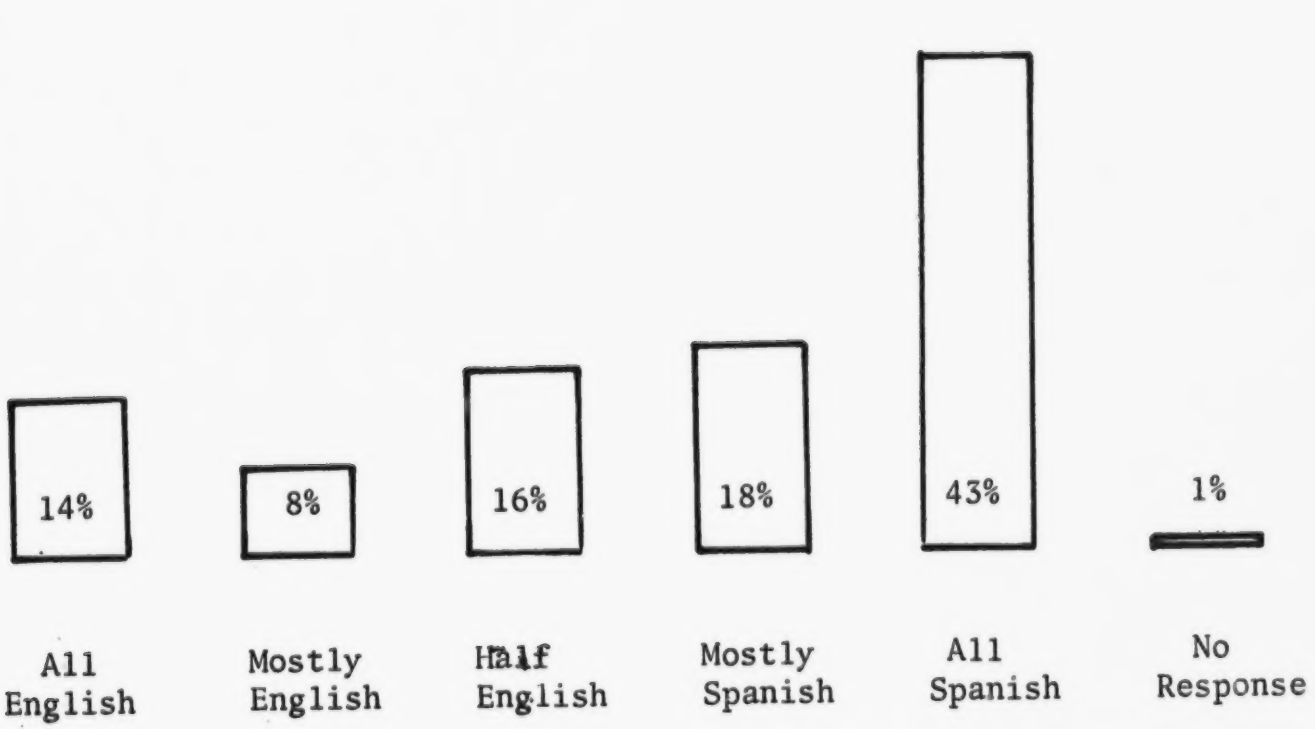


FIGURE 10

FREQUENCY OF MOTHERS ATTENDANCE AT
PARENT EVENTS SPONSORED BY THE SCHOOLS

N = 481

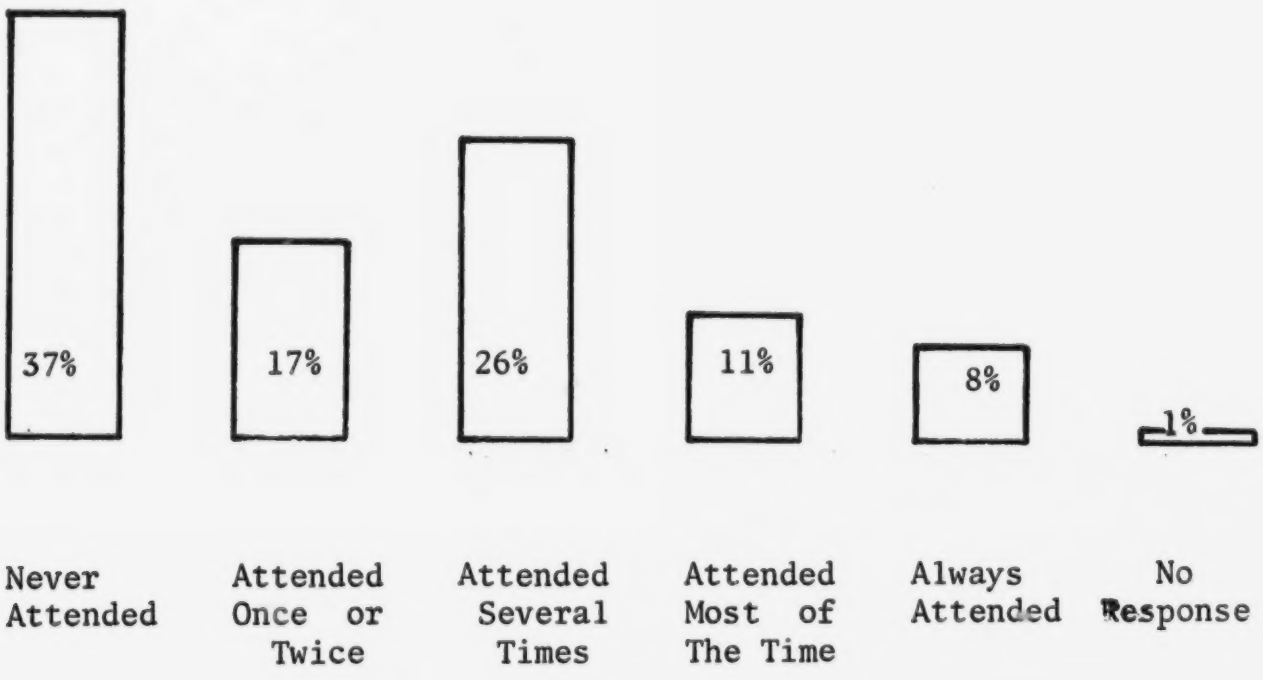


FIGURE 11

MOTHERS ASSISTANCE
WITH SCHOOL WORK

N = 481

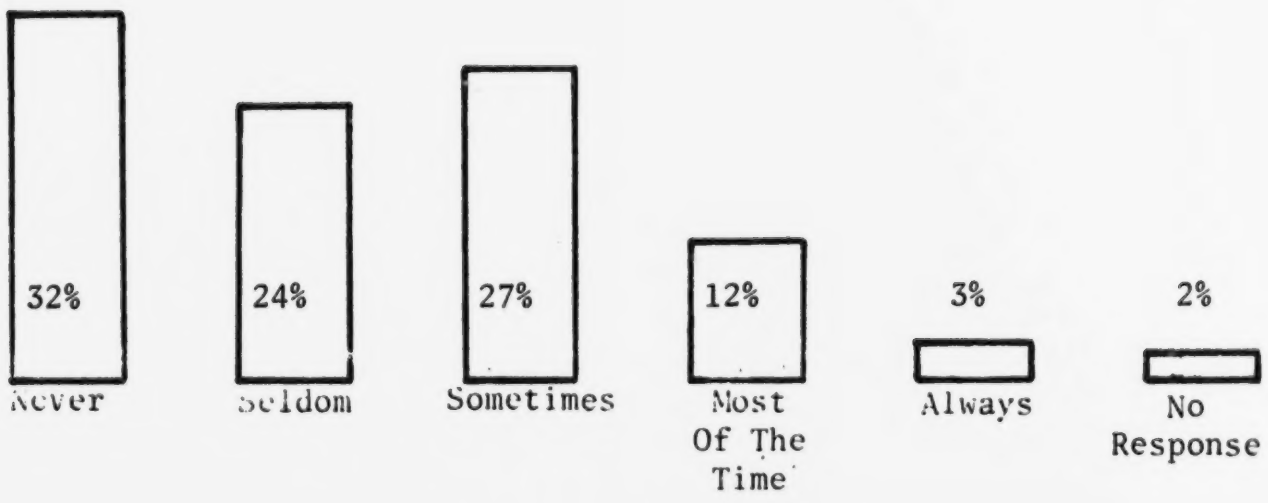


FIGURE 12

IN YOUR OPINION TO WHAT EXTENT ARE YOUR CHILDREN ENCOURAGED BY TEACHERS, COUNSELORS, AND SCHOOL ADMINISTRATORS?

N = 481

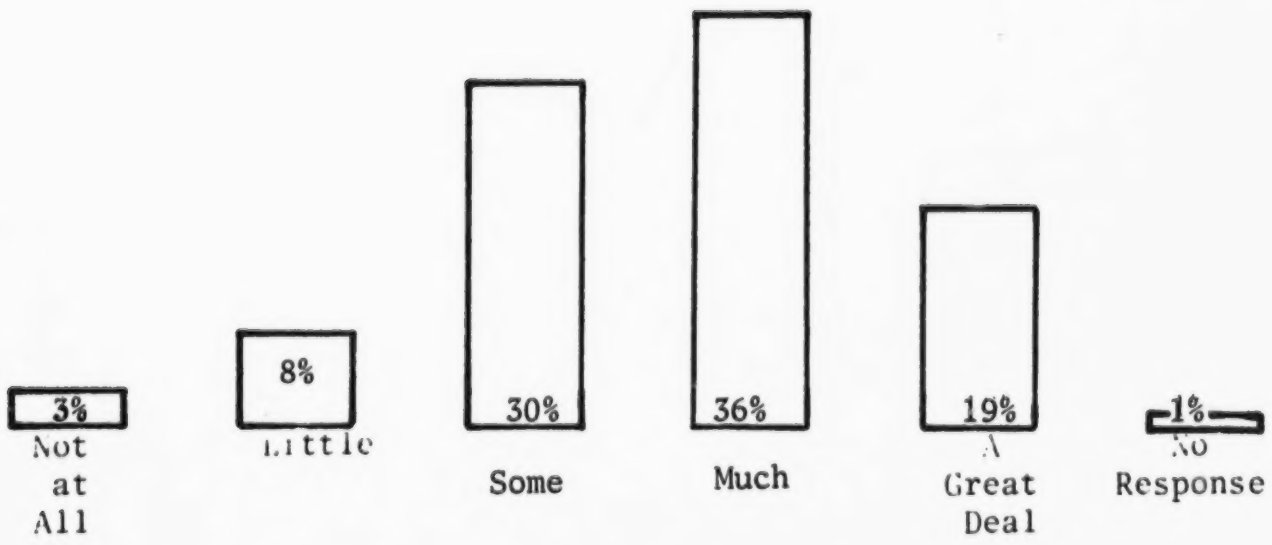


FIGURE 13

DO YOU THINK THAT TEACHERS ARE WILLING TO HELP YOUR CHILDREN WHEN THEY FIND THE SCHOOL WORK DIFFICULT?

N = 481

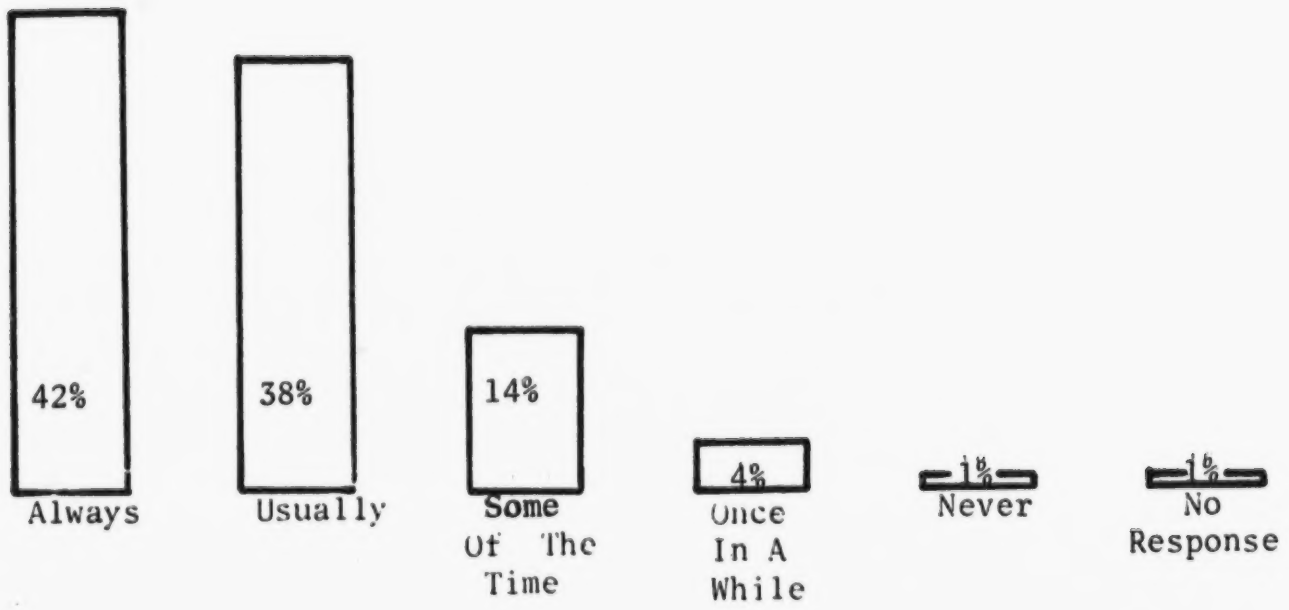


FIGURE 14

BIRTH PLACE OF CHILDREN

N = 680

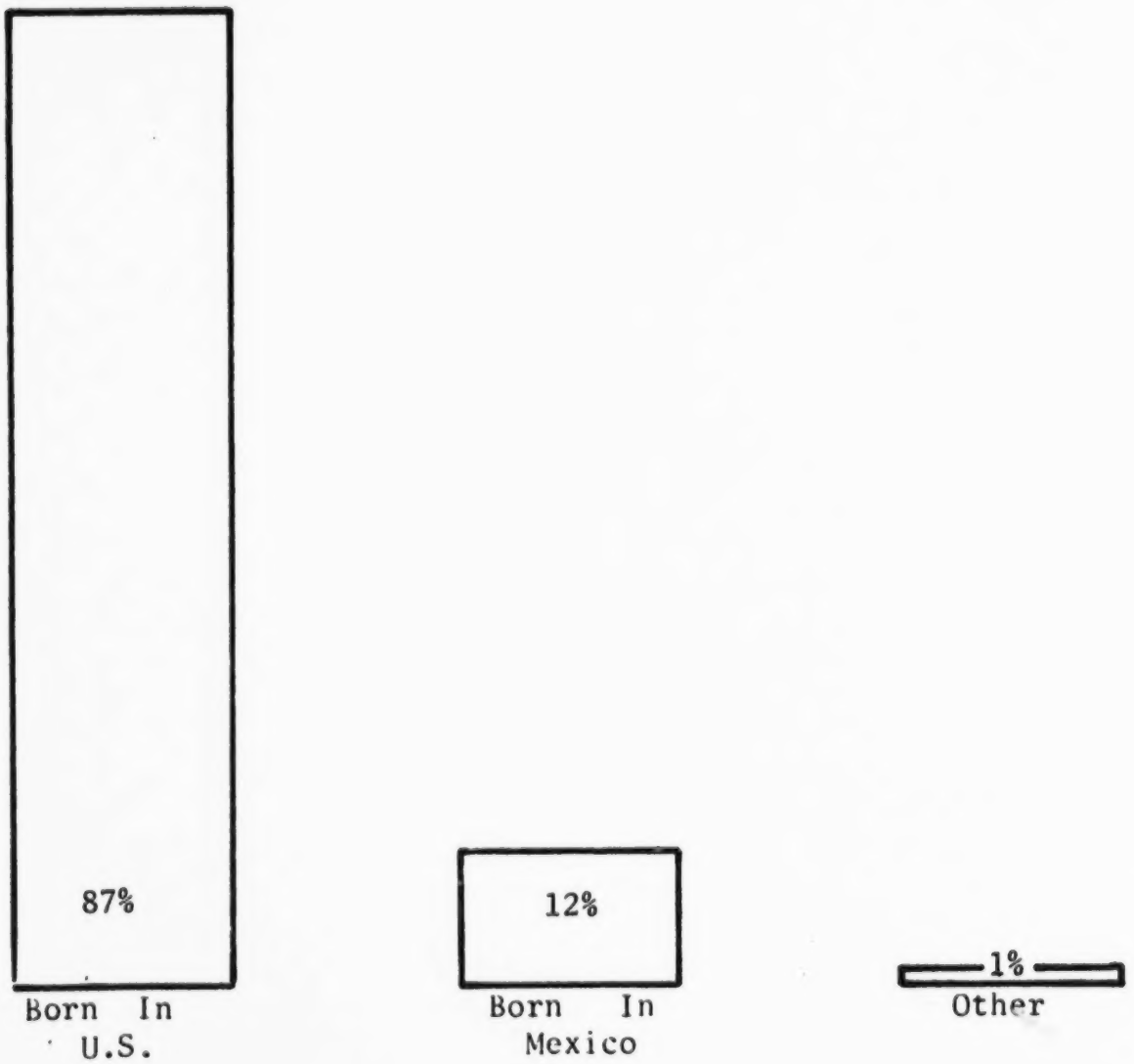


FIGURE 15

BIRTHPLACE OF CHILDREN'S PARENTS

N = 680

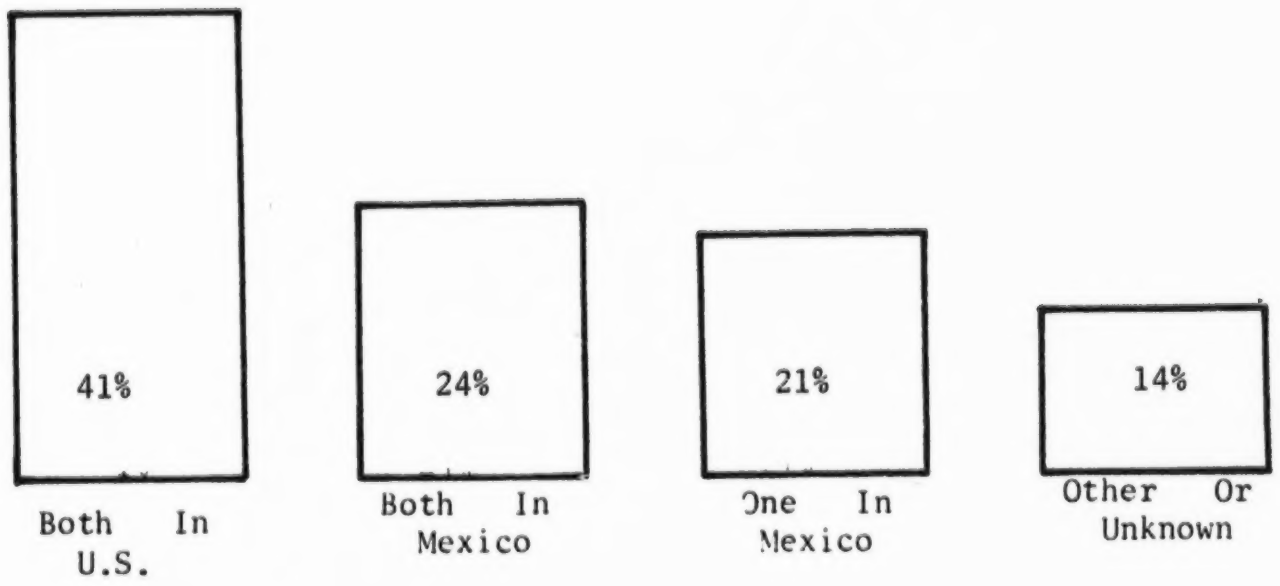


FIGURE 16

BIRTHPLACE OF GRAND PARENTS

N = 680

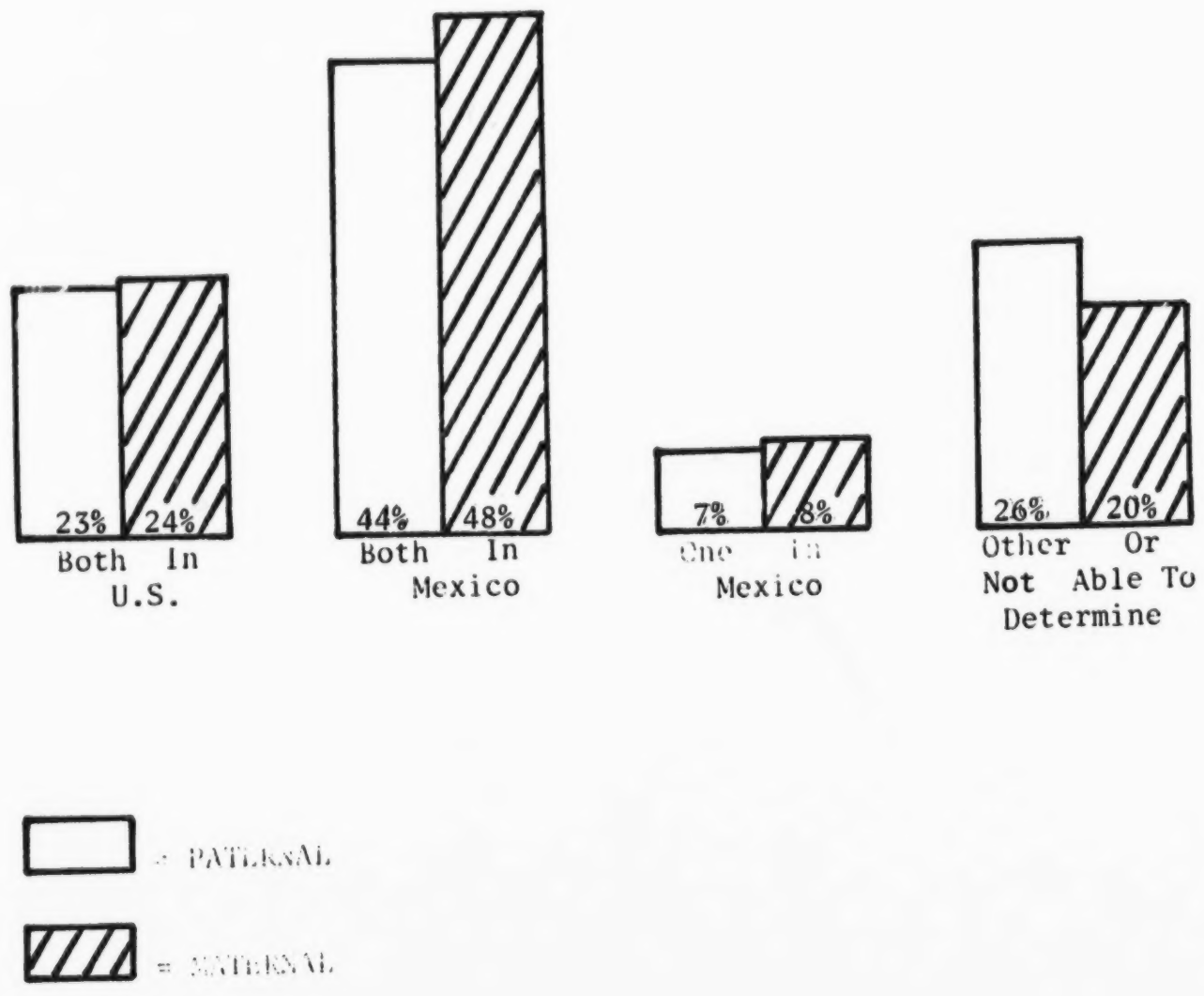


FIGURE 17

NUMBER OF SIBLINGS IN CHILD'S FAMILY

N = 680

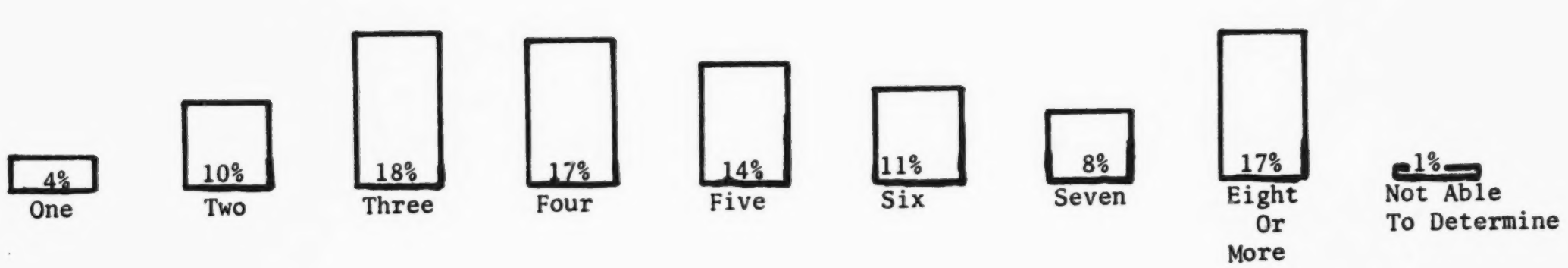


FIGURE 18

EDUCATIONAL LEVEL OF PARENTS

N = 680

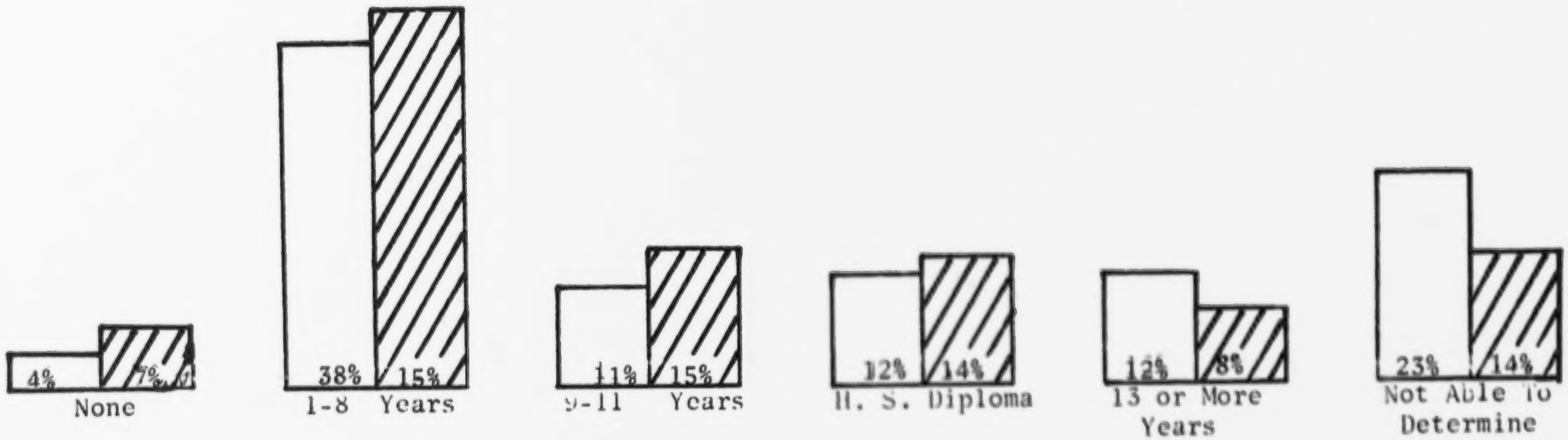


FIGURE 19

LANGUAGE SPOKEN BY CHILDREN AND PARENTS

N = 680

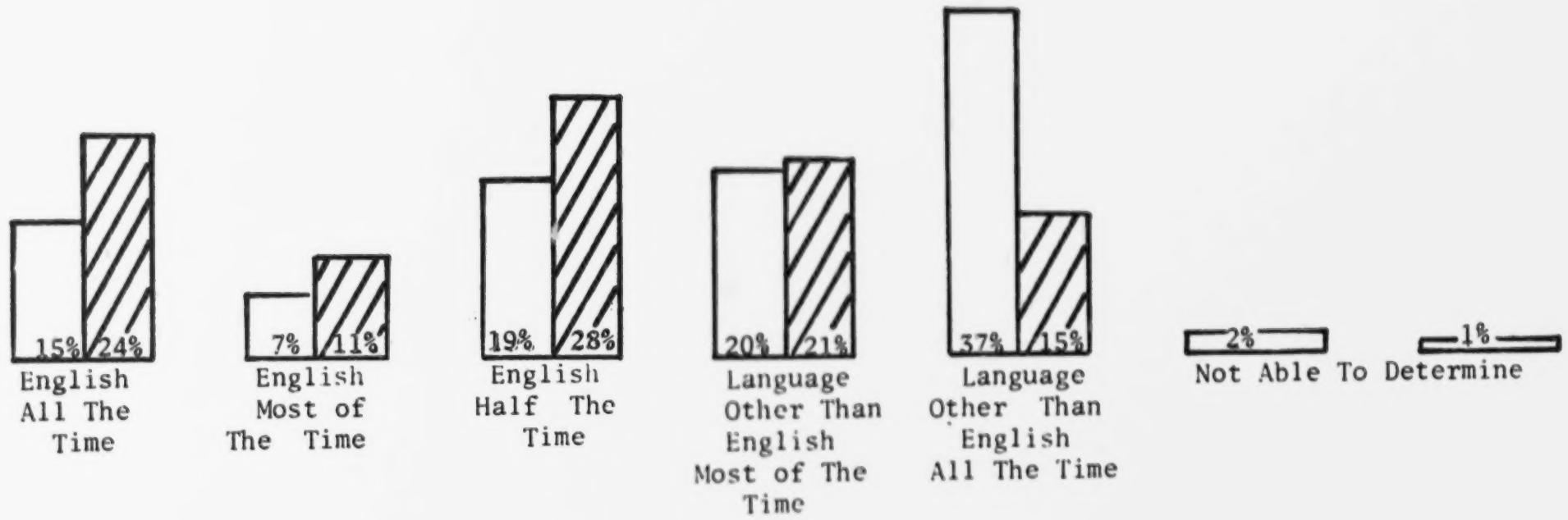


FIGURE 20

SUBJECT CHILDREN FIND THE HARDEST
N = 680

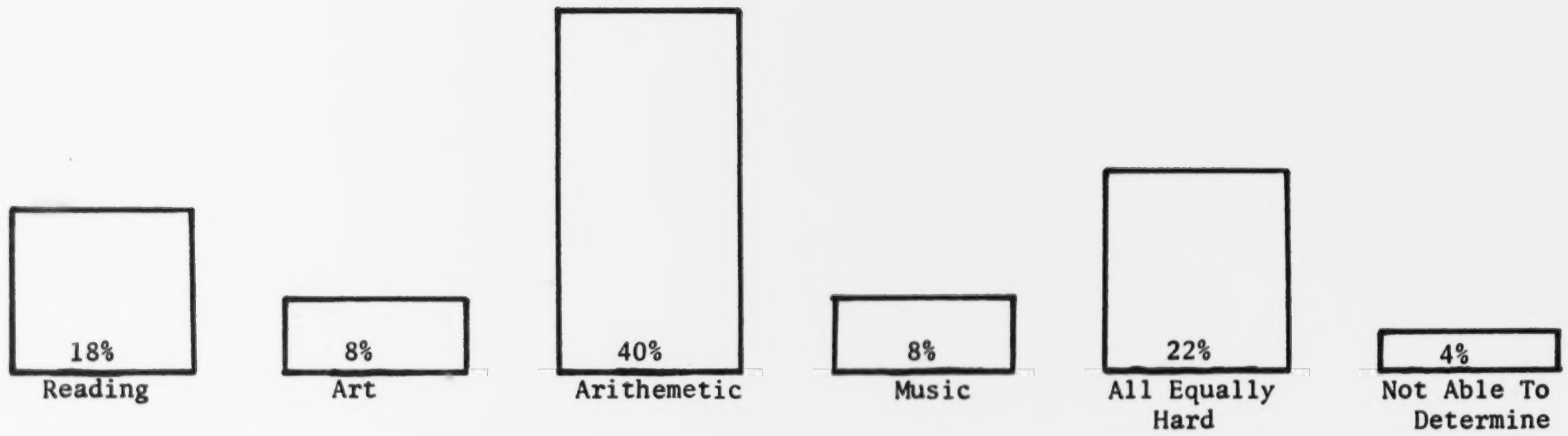


FIGURE 21

SUBJECT LIKED BEST
AND SUBJECT FOUND TO BE
THE MOST DIFFICULT

N = 1006

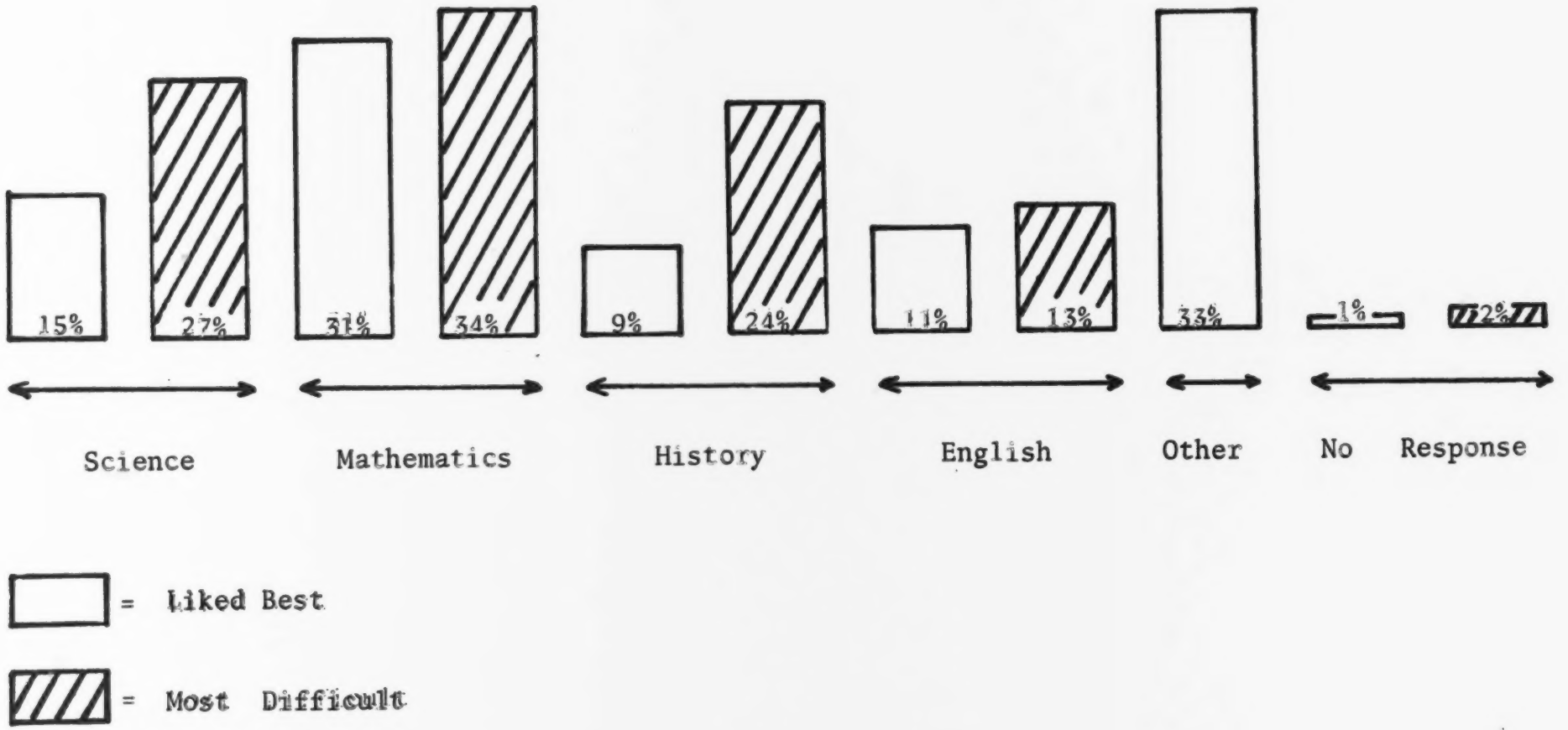


FIGURE 22

INTERMEDIATE GRADES 6-7
PERCENTAGE OF STUDENTS REPORTING
THAT THEY SPEAK ENGLISH ALL OR MOST
OF THE TIME IN CONVERSATIONS
WITH THEIR FRIENDS
BY GENERATION

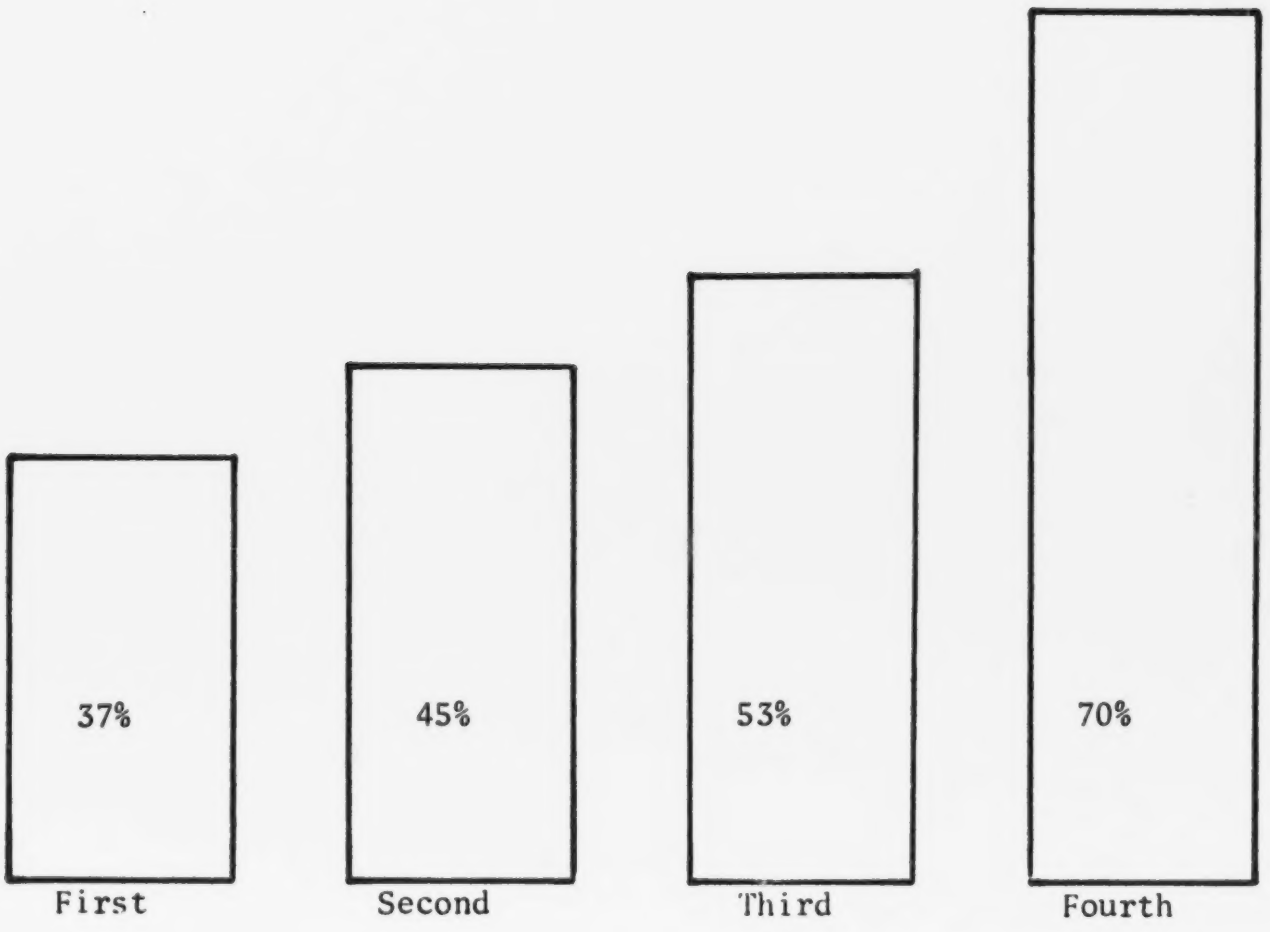


FIGURE 23

PERCENTAGE OF STUDENTS
REPORTING LESS THAN
FOUR SIBLINGS
BY GENERATION

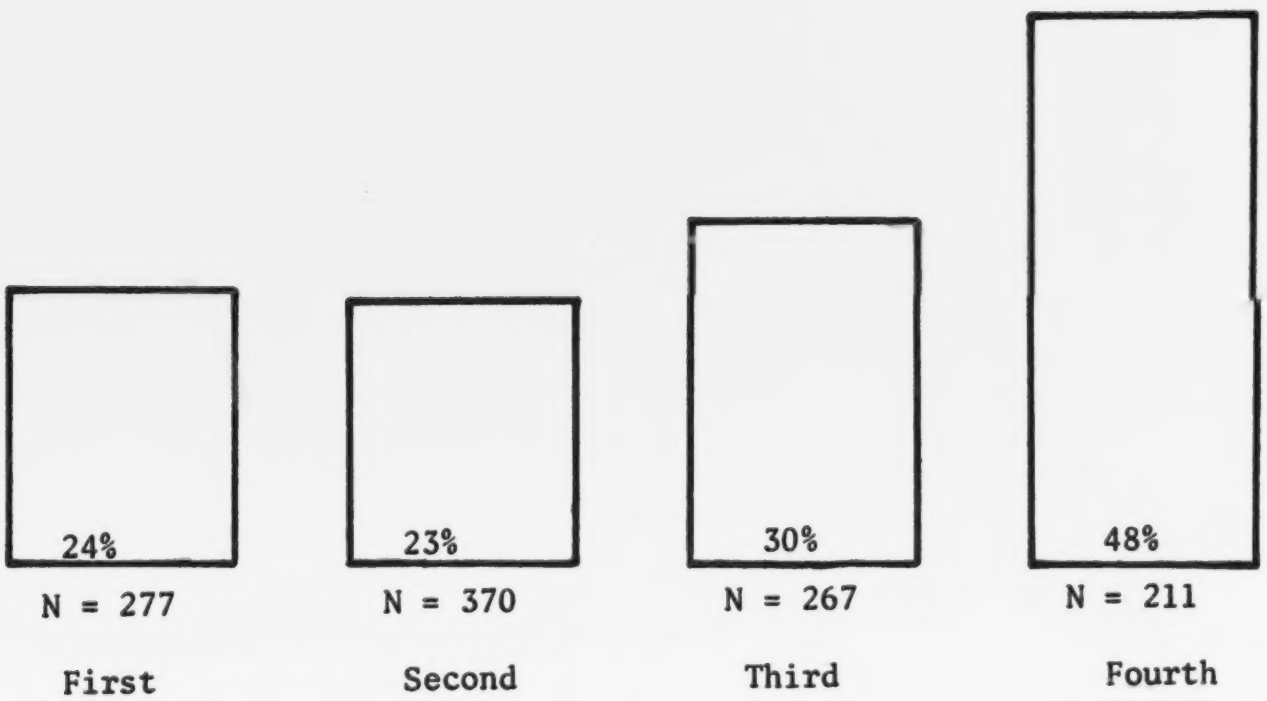


FIGURE 24

BOYS PLANS AFTER HIGH SCHOOL

N = 719

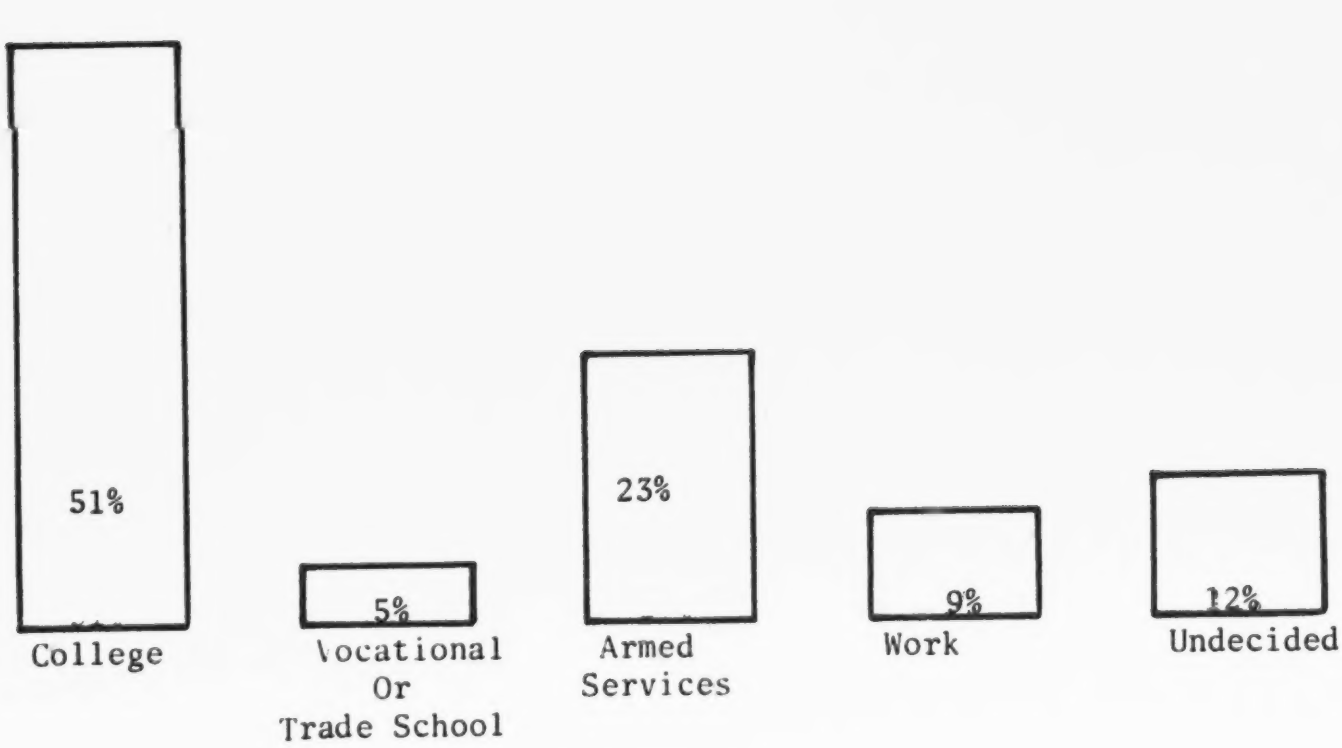


FIGURE 25

GIRLS PLANS AFTER HIGH SCHOOL

N = 662

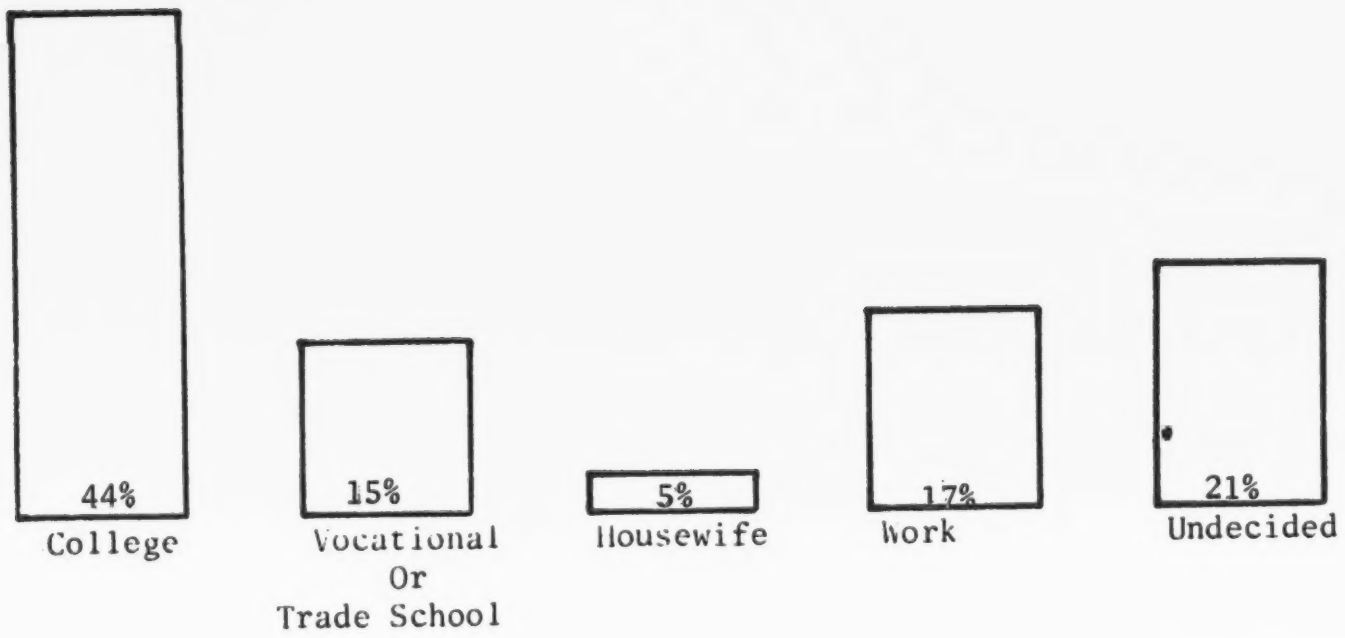


FIGURE 26

GRADES IN ENGLISH
AND IN MATHEMATICS

N = 1381

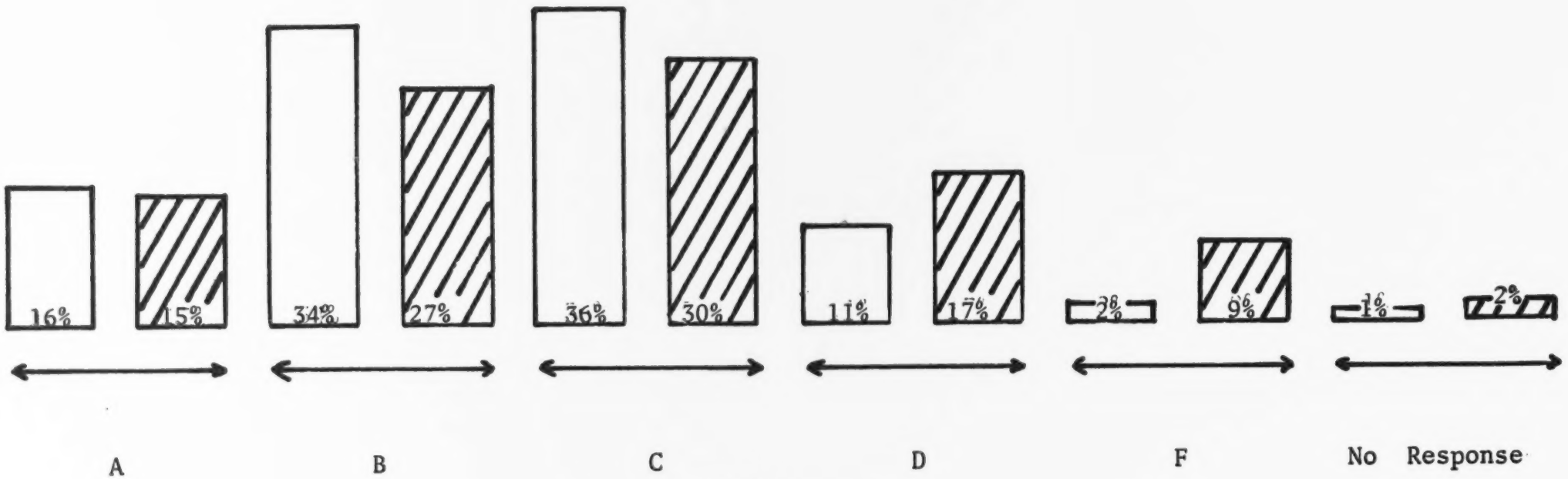


FIGURE 27

SUBJECT LIKED BEST

N = 1381

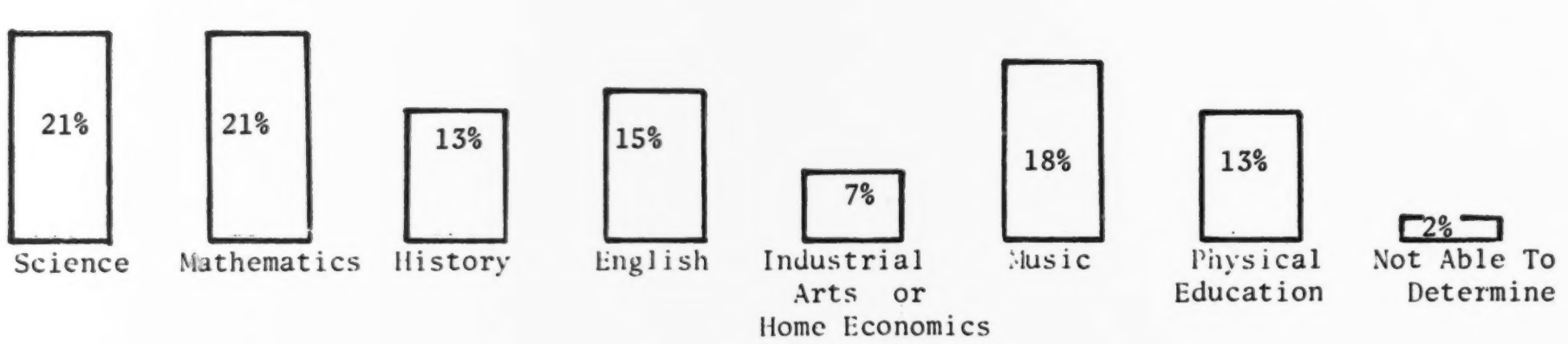


FIGURE 28

PERCENTAGE OF PARENTS AND CHILDREN SPEAKING MOSTLY ENGLISH TO EACH OTHER BY GENERATION

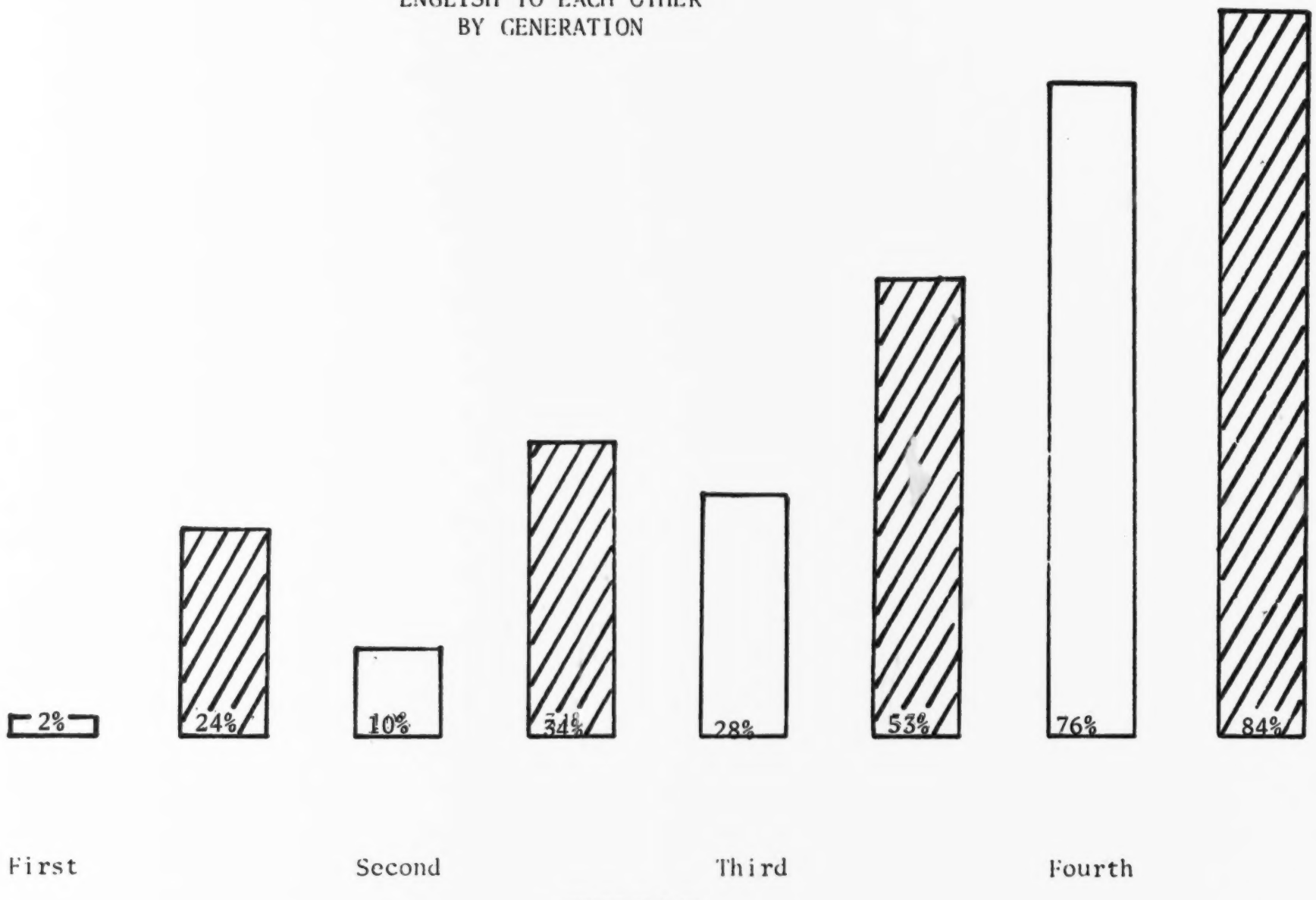


FIGURE 29

PERCENTAGE OF STUDENTS WHO
RESPONDED "MUCH" OR "VERY MUCH"
WHEN ASKED HOW MUCH THEIR FRIENDS
DESIRED TO GO TO COLLEGE

BY GENERATION

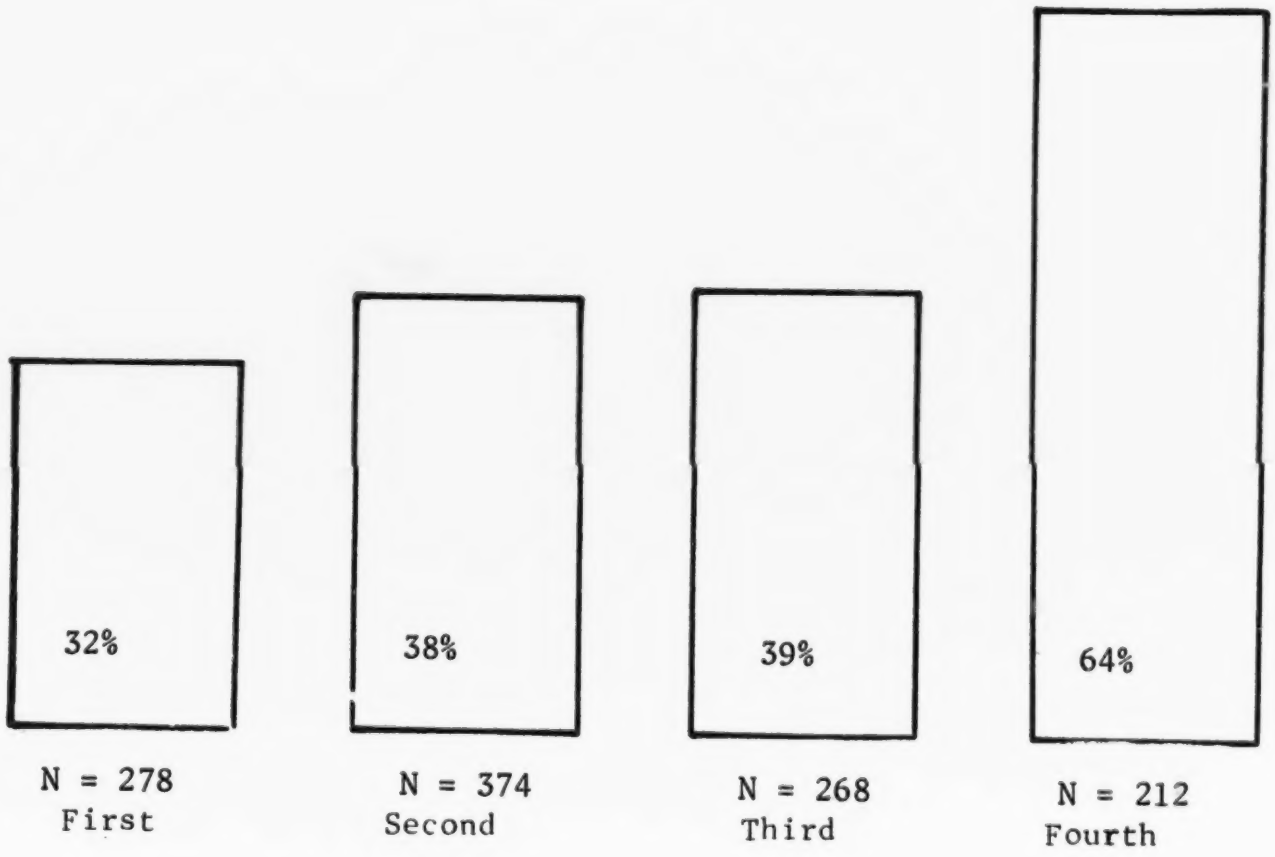
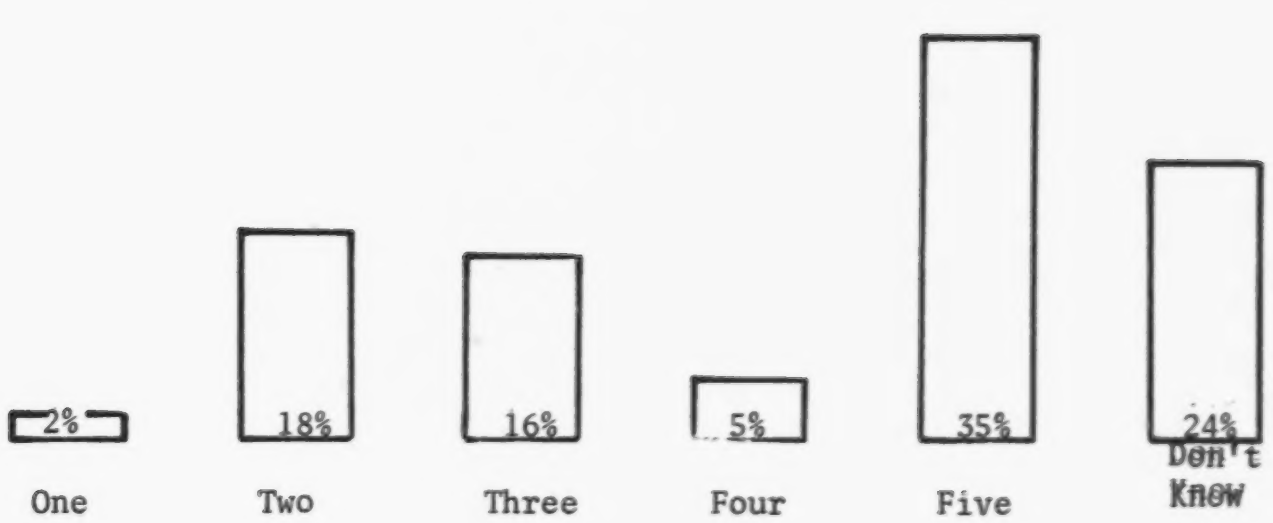


FIGURE 30

PERCENTAGE OF BOYS
WHO EXPECT TO ENTER
VARIOUS OCCUPATIONS

N = 713



OCCUPATIONAL LEVELS

One - Janitor, Farm worker, General construction worker, etc.

Two - Fireman, Policeman, Carpenter, Plumber, Mechanic, etc.

Three - Bank teller, Shipping or Warehouse clerk, Construction foreman, etc.

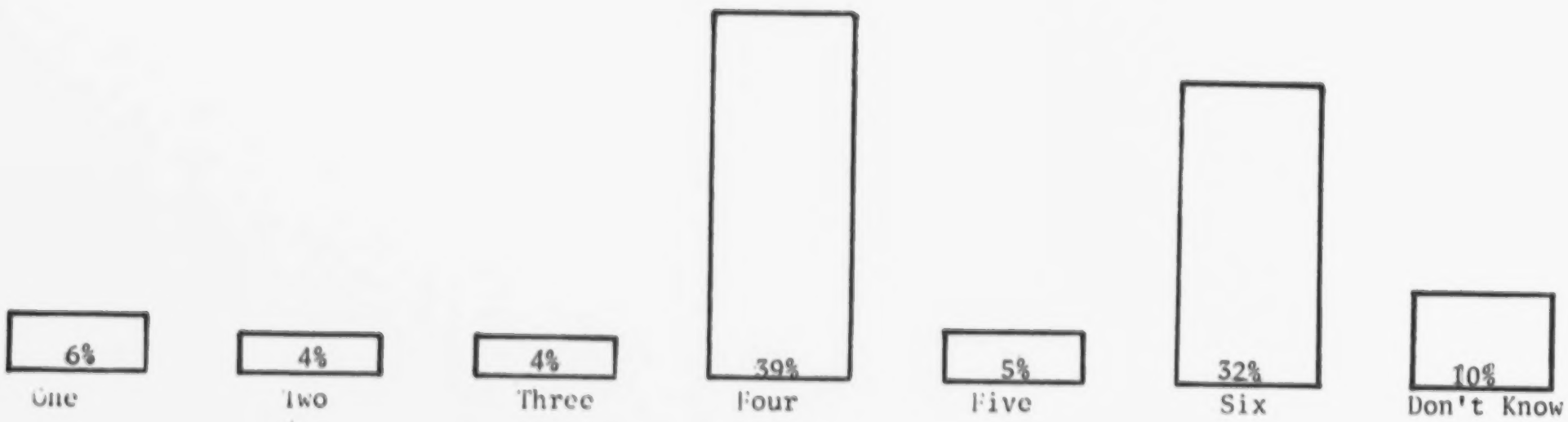
Four - Small store manager, Gas station owner, etc.

Five - Army Major, Doctor, Teacher, Pharmacist, etc.

FIGURE 31

PERCENTAGE OF GIRLS
WHO EXPECT TO ENTER VARIOUS
OCCUPATIONS

N = 650



OCCUPATIONAL LEVELS

One - Housewife and not work outside the home.

Two - Maid, General hospital employee, Washing and ironing, etc.

Three - Beautician, Barber, Policewoman.

Four - Bank cashier, Department store clerk, Receptionist, etc.

Five - Beauty shop owner, Oral hygienist, Practical nurse, etc.

Six - Teacher, Librarian, Pharmacist, Registered nurse, etc.